EXPLANATION OF THE PLATES.

PLATE XV.

Figs. 1	, 3, 5H	ypolimnas misippus,	2	(3	forms).
Fig. 2	. Danais	chrysippus.			
4	. ,,	dorippus.			
G		alaimmus			

6. ,, alcippus.

PLATE XVI.

Fig. 1. Euplaa H			Hypolimnas	
4. " pz			**	
6. ,,,:	" * .	θ,	"	" ¥·

PLATE XVII.

		polymena.	Fig. 1	1.	Hypolimnas,	
4.		dominicanus.	3	3.	,,	marginalis.
6.	"	egialea.	. 5	5.	"	dubia.

An Account of the Butterflies of the Genus *Charaxes* in the Collection of the British Museum. By ARTHUR G. BUTLER, Ph.D., &c., Senior Assistant-Keeper, Zoological Department.

[Read 7th November, 1895.]

One of the first genera which I ever studied, and the first which I monographed, was the genus *Charaxes*, a paper on which I published in 1865 in the 'Proceedings of the Zoological Society,' in which I recorded sixty-eight species (two of which, however, were noted as doubtful and were subsequently suppressed): the present paper enumerates no fewer than one hundred and fiftynine.

I have followed Prof. Aurivillius in uniting Palla to Charaxes: if kept separate, it would have to be broken up into several genera, and Charaxes itself would in like manner have to be subdivided; this, indeed, has been done for the Indian species by Mr. Moore; but apart from outline of wing I have been unable to discover any constant structural characters on which to base these genera. That wing-outline in Charaxes is not of generic importance seems clear, from the fact that (i.) in many of the species it differs to an extraordinary degree in the sexes; (ii.) the most nearly related species (as, for instance, C. Balfouri and C. varanes) differ in this respect as much as any of the proposed new genera; and, lastly, (iii.) it is not uniform, even when apparently so to a casual observer, the shortening or absence of the hind-wing tails occurring abruptly in a single species in the middle of a group.

When I last arranged *Charaxes*, about the year 1892, our series occupied a single cabinet of 20 drawers; last year, however, Messrs. Salvin and Godman (with their usual liberality)

presented the whole of their fine series of *Charaxes* to the Trustees, including the specimens formerly representing the collections of Messrs. Bates and Druce—thus enriching our already fine collection with numerous types and with specimens of many species new to us.

With such rich material, it has been possible to form a much more just estimate of the value of characters formerly held to have a specific value than could otherwise have been formed; the result being that, in some instances, described types have had to be sunk to the rank of seasonal or varietal phases, whilst in a few cases the evident constancy of certain characteristics in long series has shown that what have hitherto been regarded as varieties have some claim to be considered distinct.

The collection as it now stands fills three cabinets or sixty cabinet-drawers, and as nearly every African collection which has arrived lately has added to the species of this genus, it seems probable that another ten years will necessitate a further extension. The incorporation of the specimens in the collection of the late Mr. Hewitson will not greatly enrich the general series, so many of his specimens being without localities, that it will be necessary to treat these as duplicates; all of them are, however, recorded in the present paper.

Of the 159 described forms which I have permitted to stand as species, 142 are represented in the Museum; but as several of those included in the larger number may prove upon examination to be merely individual variations of well-known forms, it would be premature to assume that seventeen described species remained to be acquired by us.

C. odysseus may be the female of C. lactetinctus, and it is even possible that the differences which separate C. Everetti and Staudingeri from C. Durnfordi may prove not to be constant to locality. How it is that Drury's C. eudoxus has never reached us from the time when it was figured is indeed a puzzle; it is hardly possible that it can have been a made-up insect, for no two known species could be so fitted together as to produce it.

I now proceed to enumerate the whole of the species of Charaxes at present described, together with descriptions of several not previously recorded and a complete catalogue of the whole of the specimens in the Museum collection—those from the Salvin and Godman collection being referred to as "from S. & G. coll."

1. C. JASON GROUP.

1. CHARAXES BRUTUS.

Papilio brutus, Cramer, Pap. Exot. iii. pl. cexli. figs. E, F (1782). Papilio cajus, Herbst, Natursyst. Schmett. iv. pl. lxiv. figs. 1, 2 (1790).

- a. Natal (Bates coll.), &; from the Salvin & Godman collection.
- b. S. Africa, \mathfrak{P} .
- c. Delagoa Bay (Monteiro), ♀; from S. & G. coll.
- d. Slopes of Kilima-njaro (Hannington), 3.
- e. Zomba (Macclounie), 3.
- f. Taita, E. Africa (J. A. Wray), J.
- g. Croboe Distr., Accra (Higlett), 3.
- h. Acera (E. T. Carter), \circ .
- i,j. Victoria, Cameroons (Druce coll.), ♂,♀; from S. & G.
 - k. Sierra Leone (Dr. Preuss), &; from S. & G. coll.
 - l. Sierra Leone (Foxcroft), \circ .
 - m. Gold Coast, J.
 - n. Winnebar, W. Africa (C. R. Williams), &; from S. & G. coll.

Var. with unusually broad band across primaries.

o. Accra (Higlett), \mathfrak{P} .

Var. with unusually narrow band across primaries.

- p. West Africa, d.
- q. Angola (Monteiro, Druce coll.), ♀; from S. & G. coll.
- r. W. Africa, Q.

Hewitson coll.

- s. Natal, 3.
- t. Without locality, d.
- u. Old Calabar, ♀.
- v. Without locality, \circ .

The South-African specimens have the band on the primaries more sinuous, wider at the back and narrower in front than in the West Coast examples; on the under surface also the discal outer bordering of the white belt is dull brick-red, like the centre of the submarginal spots, whereas in the Western form it is ochreous; examples from Delagoa Bay and East Africa are

intermediate in character and completely link the two local races.

2. CHARAXES ANDARA.

Charaxes andara, Ward, Ent. Month Mag. ix. p. 209 (1873); Mabille, in Grand. Mad. p. 187, pl. xxii. figs. 4-6 (1887).

- a. Antananarivo (Rev. R. Toy), d.
- b, c. Fort Dauphin (M. J. Cloisel), Q Q.

Hewitson coll.

- d-f. Without locality, ♂ ♂.
 - g. Without locality; confounded with C. cacuthis, Q.

3. CHARAXES DRUCEANUS.

Charaxes Druceanus, Butler, Cist. Ent. i. p. 4, n. 1 (1869); Lep. Exot. pl. 10. fig. 4 (1870); Westwood, Thes. Oxon. p. 182, pl. 34. fig. 6 (1874). Charaxes cinadon, Hewitson, Ent. Month. Mag. vi. p. 177 (1870).

- a. Old Calabar (Bates coll.), &; from S. & G. coll.
- Type, b. Old Calabar (Druce coll.), &; from S. & G. coll.
 - c. Gaboon (Druce coll.), &; from S. & G. coll.
 - d. Zomba (Macclounie), ♀.
 - e. Orange River (Druce coll.), &; from S. & G. coll.
 - f. Kaffraria (Druce coll.), &; from S. & G. coll.
 - g. Nyika, Nyasa-land (R. Crawshay), &.

Hewitson coll.

- h. Without locality (probably type of C. cinadon), &.
- i. Orange River, &.

4. Charaxes andranodorus.

Charaxes andranodorus, *Mabille*, *Bull. Soc. Ent. Belg.* 1884, p. 184; *Grand. Mad.* p. 182, pl. xxi. figs. 1 & 1 a, pl. xxv. a. figs. 1 & 1 a (1887).

Var. 3. Charaxes zoippus, Mabille, Bull. Soc. Ent. Belg. 1884, p. 185; Grand. Mad. p. 179, pl. xxv. figs 2 & 2 α (1887).

- a, b. Fianarantsoa (Deans Cowan), \eth , Q.
 - c. Ankafana, Betsileo (Deans Cowan), ♀.
 - d. Madagascar (Druce coll.), ♀; from S. & G. coll.

Hewitson coll.

e. Without locality, labelled Druceanus, 3.

The male described as C. zoippus differs so slightly from that sex of typical C. andranodorus, that I can only regard it as a sport.

5. CHARAXES PHRAORTES.

Charaxes phraortes, *Doubleday*, *Proc. Zool. Soc.* 1847, p. 60; *Butler*, *Lep. Exot.* pl. x. fig. 6 (1870); *Grand. Mad.* p. 177, pl. xxv. figs. 1 & 1 a (1886).

Type, a. Madagascar (Dr. Lyall), ♀.

This species must be very local, for the type still appears to be unique.

6. CHARAXES PHŒBUS.

Charaxes phœbus, Butler, Proc. Zool. Soc. 1865, p. 625, pl. xxxvi. fig. 2. Types, a, b. Abyssinia (SirW.C. Harris' Expedition to Shoa), \mathcal{F} , \mathcal{Q} .

7. Charaxes eudoxus.

Papilio eudoxus, Fabricius, Ent. Syst. iii. 1, p. 65, n. 203 (1793); Drury, Ill. iii. pl. xxxiii. figs. 1, 2.

"Sierra Leone."

This species is evidently intermediate between C. phabus and C. pollux, the under surface more nearly resembling the former and the upper surface the latter species.

If *C. eudoxus* actually came from Sierra Leone, it is a most remarkable fact that none of the collections recently received from that locality have contained it, and that, up to the present time, Drury's figures are all that remain to show us what this species is like.

8. CHARAXES POLLUX.

Papilio pollux, Cramer, Pap. Exot. i. pl. xxxvii. figs. D, E (1776). Papilio camulus, Drury, Ill. iii. pl. xxx. figs. 1, 2 (1782).

- a, b. Sierra Leone (Barchard), 3 3.
 - c. Sierra Leone (P. Crowley), Q.
- d, e. Sierra Leone (coll. Druce), &; from S. & G. coll.
 - f. Sierra Leone (coll. Bates), &; from S. & G. coll.
- g, h. Sierra Leone (Dr. Preuss), $\delta \delta$; from S. & G. coll.
 - i. Sierra Leone (coll. Druce), d.
 - j. Angola (Monteiro), ♂; from S. & G. coll.
 - k. Monbuttu (Emin Pasha), 3.
 - l. Zomba (Macclounie), d.

Hewitson coll.

- m-o. Sierra Leone, δ .
- p, q. Sierra Leone, ♀.

9. CHARAXES HANSALII.

Charaxes Hansalii, Felder, Reise der Nov., Lep. iii. p. 446, n. 728, pl. 59. figs. 3, 4 (1867).

a. Abyssinia (coll. Kaden), J; from S. & G. coll.

Hewitson coll.

b. Bogos, ♀.

This very rare species has been confounded with the yellow-banded form of *C. castor*, to which I have given the name of *C. flavifasciatus*. Through the carelessness of Fabricius, *C. castor* and *C. pollux* have been transposed: in my monograph (P. Z. S. 1865) I supposed the Fabrician names to have priority and therefore followed his lead; Kirby put the synonymy right, but left the species in the wrong places.

10. CHARAXES CASTOR.

Papilio castor, Cramer, Pap. Exot. i. pl. xxxvii. figs. E, F (1776). Papilio pollux, Fabricius, Ent. Syst. iii. 1, p. 63, n. 197 (1793). Var. Charaxes flavifasciatus, Butler, Proc. Zool. Soc. 1895, p. 251.

Var. flavifasciatus.

- a, b. Delagoa Bay (Monteiro), ♂,♀; from S. & G. coll.
 - c. Zambesi (Bates coll.), ♀; from S. & G. coll.
 - d. Upper Egypt, d.
- e, f. Central Africa ($Emin\ Pasha$), \eth \eth .
 - g. Zomba (Macclounie), d.
 - h. Acera (E. T. Carter).

Hewitson coll.

i, j. Delagoa Bay, \mathcal{J} , \mathcal{P} .

C. castor typical.

- k. Sierra Leone (Dr. Preuss), &; from S. & G. coll.
- l. Sierra Leone (Barchard), ♀.
- m. Old Calabar (Bates coll.), &; from S. & G. coll.
- n. Old Calabar (White), &; from S. & G. coll.
- o. Cameroons, &; from S. & G. coll.
- p. Angola (Monteiro), &; from S. & G. coll.
- q. Ashanti, 3.
- r. Sierra Leone (Foxcroft), \circ .
- s, t. Lake Tanganyika (C. Hore), & &.
 - u. Mamboia, E. Africa (Dr. Kirk), &; from S. & G. coll.

- v. Sierra Leone, d.
- w, x. Fernando Po, \mathcal{Q} .

The pale-banded form is the commoner type in the East, and the orange-banded form in the West. It is probable that they represent two races, the ranges of which overlap: in such cases it seems to me imperative that both forms should have names. As we have not received *C. flavifasciatus* (in any instance) with the typical form, it is possible that they do not actually occur together.

11. CHARAXES SATURNUS.

♂. Charaxes saturnus, Butler, Proc. Zool. Soc. 1865, p. 624, pl. xxxvi. fig. 1; ♀, Lep. Exot. i. p. 5, pl. ii. fig. 2 (1869).

Charaxes pelias (part), Trimen, Rhop. Afr. Austr. i. p. 175 (1862).

- a. Congo, &*.
- b. West Africa, ♀; from S. & G. coll.
- c. Angola (Monteiro), d; from S. & G. coll.
- d. Angola (Rogers), ♀; from S. & G. coll.
- e. Lake Tanganyika (C. Hore), 3 †.
- f. Zomba (Macclounie), d.
- g, h. Taita, E. Africa (J. A. Wray), ♂,♀.
 - i. Damara-land (Bates coll.); from S. & G. coll.
- j, k. Matabele (Selous), &; from S. & G. coll.

Type, l. Zambesi (H. Walter), d.

- m. Delagoa Bay (Monteiro), &.
- n. Delagoa Bay (Monteiro), &; from S. & G. coll.
- o. Durban (G. E. Shelley), &; from S. & G. coll.

Hewitson coll. (as C. pelias).

- p. Delagoa Bay, d.
- q, r. Angola, \mathcal{F} \mathcal{F} .
- s, t. Congo, δ, \circ .

Var. laticinctus.

Charaxes saturnus, var. laticinctus, Butler, P. Z. S. 1895, p. 251.

Type, u. Sulim bin Najimb, Konde (R. Crawshay), &.

- v. Zomba (Macclounie), Q.
- w. Shiré River (Bates coll.), &; from S. & G. coll.
- * Examples from the Congo and Angola are larger than elsewhere and have the blue spots on the hind wings better developed.
 - † Also a second imperfect male from Niomkolo.

This form approaches *C. jason*; indeed, excepting for the well-defined tawny band which crosses the upper surface of the wings, it more nearly approaches that species than it does *C. pelias*.

12. CHARAXES PELIAS.

Papilio pelias, Cramer, Pap. Exot. i. pl. iii. figs. C, D (1775). Charaxes pelias, Butler, Lep. Exot. i. pl. x. fig. 5 (1870).

a, b. Locality not recorded (Druce coll.), δ, \$\Q^c\$; from S. & G. coll.

As is well known, this species, which is still extremely rare in collections, appears to be confined to South Africa.

13. CHARAXES JASON.

Papilio jason, Linnæus, Syst. Nat. i. 2, p. 749 (1767); Drury, Ill. Exot. Ent. i. pl. 1. fig. 1 (1773).

Papilio jasius, Fabricius, Syst. Ent. p. 449 (1775).

Papilio rhea, Hübner, Eur. Schmett. i. figs. 111, 112 (1794).

Eribœa unedonis, Hübner, Verz. p. 47 (1816).

a. Corsica (Col. Yerbury), J.

b. Spain (Bates coll.), 2; from S. & G. coll.

c-e. Central Europe (Druce coll.), & &; from S. & G. coll.

f. S. France (Bates coll.), &; from S. & G. coll.

g-i. Europe (Zeller coll.), ♂ ♂.

j-l. Europe, ♀, ♂ ♂.

Hewitson coll.

m-p. Without locality, δ , Q Q.

14. CHARAXES EPIJASIUS.

Charaxes epijasius, Reiche in Ferr. Gal. Voy. Abyss., Ent. p. 469, pl. 32. figs. 1, 2 (1849).

a. White Nile (Petherick), 3.

b, c. Abyssinia, Atbara, d d.

d, e. Senegal, & d.

f. Senegal (coll. Kaden), d; from S. & G. coll.

g. Lower Niger (W. A. Forbes), &; from S. & G. coll.

Hewitson coll.

h-j. Without locality, $\delta \delta$, Q.

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2. C. FABIUS GROUP.

15. CHARAXES ACHÆMENES.

Charaxes achæmenes, Felder, Reise der Nov., Lep. iii. p. 446, pl. 59-figs. 6, 7 (1867).

Charaxes jocaste, *Boisduval MS.*, *Butler*, *P. Z. S.* 1865, p. 628; *Trans. Ent. Soc.* 1869, p. 274.

- a, b. Senegal, δ , \circ .
- c-e. Abyssinia (Druce coll.), ♂ ♂,♀; from S. & G. coll.
- f-h. Abyssinia, Atbara, \mathcal{Q} \mathcal{Q} , \mathcal{J} .
 - i. Kandera (Emin Pasha), &.
 - j. Zomba (A. Whyte), 3.
- k, l. Delagoa Bay, \mathcal{J}, \mathcal{Q} .
 - m. Delagoa Bay (Monteiro), ♀; from S. & G. coll.
- n, o. Zambesi (Bates coll.), ♀, ♂; from S. & G. coll.

Hewitson coll.

p-t. Delagoa Bay, $\delta \delta$, Q Q.

16. CHARAXES FABIUS.

Papilio fabius, Fabricius, Spec. Ins. ii. p. 12 (1781).

Papilio solon, Fabricius, Ent. Syst. iii. 1, p. 69 (1793).

Papilio euphanes, Esper, Ausl. Schmett. pl. 59. fig. 1 (1785-90).

Burmese race, with markings above brimstone-yellow.

- a. Thoungyeen Valley, Tenasserim (Capt. Chas. Bingham).
- b, c. Tilin Yaw, Burma (E. Y. Watson).

Typical race.

- d. Mhow (Col. Swinhoe), d.
- e. Bombay (Hunter), Q.
- f. Bombay, J; from S. & G. coll.
- g. Poona (Col. Swinhoe), ♀.
- h. Neilgherries (Col. Swinhoe), d.
- i. Madras (E. Y. Watson), J.
- j, k. Madras (Vigors coll.), $\mathfrak{P}, \mathfrak{F}$.
- l, m. Ceylon (Col. Yerbury), & &.
 - n. Ceylon (Whyte), &; from S. & G. coll.

17. CHARAXES LAMPEDO.

- Q. Eribœa lampedo, Hübner, Samml. exot. Schmett. ii. pl. 52. figs. 3, 4.
- d. Charaxes zephyrus, Butler, Cist. Ent. i. p. 5 (1869); Lep. Exot. i. pl. x. fig. 1 (1870).

- Type, a. Without locality (coll. Druce), &; from S. & G. coll.
 - b. Palawan, Philippines (Dr. Platen), &; from S. & G. coll.
 - c. Without locality (coll. Kaden), 2; from S. & G. coll.

18. CHARAXES ECHO.

Charaxes echo, Butler, Ann. & Mag. Nat. Hist. ser. 3, vol. xx, p. 401, pl. viii. figs. 5, 6 (1867).

- a. West coast of Borneo, d.
- b. Labuan, Borneo (Low), &; from S. & G. coll.

Hewitson coll. (as C. lampedo).

- c. Borneo, ♂.
- d. Sarawak (Wallace), d.

19. CHARAXES HANNIBAL.

Charaxes hannibal, Butler, Lep. Exot. i. p. 14, pl. vi. fig. 5 (1869).

Hewitson coll. (as C. lampedo).

Type, a. Tondano, Celebes (Wallace), ♀.

b. Macassar, ♀.

This species seems to be closely allied to *C. echo*, and it is just possible that it may prove to be the female of that species; but hitherto I have seen no females of *C. echo* from Borneo, and therefore am unable to say whether the differences which exist are merely sexual or local.

3. C. ORILUS GROUP.

20. CHARAXES ORILUS.

Charaxes orilus, Butler, Lep. Exot. i. p. 13, pl. v. fig. 5 (1869).

Hewitson coll.

Type, a. Timor (Wallace), ♂.

The following is one of the most interesting groups in the genus, the greater number of the males being so similar that they are confounded in most collections under the names of *C. ephyra* or *C. ethalion*; many of the females, however, are widely different.

Another point of interest is that in some of the species there are both blue-banded and white-banded females; these are probably seasonal forms.

Owing to the slight differences which characterize some of the males, it is not surprising to find that they have not been referred to their proper females; but, on the other hand, it is singular that even careful Lepidopterists have agreed in regarding two distinct females as sexes in more than one instance.

4. C. ETHEOCLES GROUP.

21. CHARAXES GUDERIANA.

- J. Nymphalis Guderiana, Dewitz, Nova Acta Akad. Naturf. Halle, 1879, p. 200, pl. ii. fig. 18.
- Q. Charaxes Guderiana, Butler, Proc. Zool. Soc. 1893, p. 648; Trimen, Proc. Zool. Soc. 1894, p. 42, pl. v. fig. 8.
 - a-c. Lake Mweru (R. Crawshay), ♂ ♂.
 - d. Fwambo (A. Carson), Q.
 - e. British E. Africa (Dr. Gregory), &.
 - f-h. Zomba (A. Whyte), Q, d d.
 - i. Zomba (A. Sharpe), 3.

Hewitson coll. (as C. alladinis 3).

j. Nyasa, δ .

22. CHARAXES KIRKII.

- Q. Charaxes Kirkii, Butler, Ent. Month. Mag. xviii. p. 105 (1881).
- J. Charaxes Kirkii, Butler, Proc. Zool. Soc. 1888, p. 60.
 - a. Foda ($Emin\ Pasha$), σ .
- Type, b. Mamboia (Dr. Kirk), \circ .
 - c. Kandera ($Emin\ Pasha$), \eth .
 - d, e. Abyssinia (Druce coll.), & &; from S. & G. coll.

Hewitson coll. (as C. alladinis ♂).

f. White Nile, d.

This is the nearest ally of *C. Guderiana*, which it approaches in both sexes. In the male the discoidal and two following subcostal spots on the primaries are lilacine and small, and, as a rule, only two of the submarginal series exist, even these are small with lilac edges; very rarely one or two extra white points occur; the marginal spots also are bluish grey or bronze-greenish, not white; on the secondaries the blue band is either wholly wanting, or represented by two or three separate greenish lunules, and in the marginal lunules green takes the place of white and the red central streaks upon them become more or less pronounced. The female is in some respects nearer to that sex of *C. viola*,

and the form of the tawny band across the primaries agrees with that of the white band of *C. etheocles*.

23. CHARAXES VIOLA.

- Q. Charaxes viola, Butler, Proc. Zool. Soc. 1865, p. 627, pl. xxxvi. fig. 4.
- ♀ (as ♂). Charaxes chiron, Staudinger, Exot. Schmett. p. 168, pl. lviii. (1866).
 - a. Old Calabar (White), 3; from S. & G. coll.
 - b. West Africa, ♀.
 - c. Angola (Rogers), &; from S. & G. coll.
 - d, e. Ashanti, & d.
 - f. Croboe District, Accra (Higlett), d.

Hewitson coll. (as C. ephyra 3).

g. Angola, δ .

The male of *C. viola* nearly resembles that of *C. Kirkii*, but has a greener tint above and a redder tint below; the two subapical spots on the upper surface of the primaries are wanting, and the marginal spots are metallic green; the red streaks on the marginal lunules of the secondaries are almost or altogether obliterated. Staudinger's so-called male from Senegal is unquestionably a female; how he failed to recognize its identity with this insect figured by me in 1865 I do not understand.

24. CHARAXES ETHEOCLES.

- Q. Papilio etheocles, Cramer, Pap. Exot. ii. pl. exix. figs. D, E (1779).
- 3. Papilio ephyra, Godart, Enc. Méth. ix. p. 355, no. 18 (1823).
 - a. Ondo country, Lagos (Sir G. Carter), &; from S. & G. coll.
 - b. Cape Coast, W. Africa (F. Niblett), ♀.
 - c. Barombi, Cameroons (Druce coll.), ♂; from S. & G. coll.
 - d. Stanley Pool, Congo River (H. H. Johnston), ♂; from G. & S. coll.

The male on the upper surface much resembles that sex of C. viola, but the marginal spots of the primaries are smaller and less diffused, the white submarginal spots of the secondaries are also smaller. On the under surface the differences are more pronounced, the whole basal area being more or less suffused with white, and the lunate spots towards outer margin much darker and well-defined. M. Godart's description is sufficiently good to identify the species with certainty.

25. CHARAXES ROSÆ.

Q. Charaxes rosæ, Butler, Proc. Zool. Soc. 1895, p. 255.

Charaxes phæus Q, Hewitson, Ent. Month. Mag. vol. xiv. p. 82 (1877); Trimen, South Afr. Butt. i. p. 344 (1887).

Var. ? Charaxes alladinis Q, Dewitz, Nova Acta Akad. Naturf. Halle, vol. 50. no. 4, pl. xvii. fig. 9 (1887).

Types, a, b. Delagoa Bay, $\beta \circ 2$.

c, d. Delagoa Bay (Monteiro), σ , φ ; from S. & G. coll.

e. Zomba, & (Macclounie).

f. Lake Tanganyika (C. Hore), J.

Hewitson coll.

g, h. Delagoa Bay (Monteiro), $\mathcal{Q} \mathcal{Q}$.

The male is a shorter and broader insect than that sex of any of the preceding species: the primaries are less falcate, with the outer margin much less inarched; these wings on the upper surface are immaculate, but the secondaries show precisely the same markings on the outer border as the female; the under surface is glossed precisely as in the female, and sometimes shows well-marked indications of the whitish characters of that sex. The only species with which it might be confounded, if carelessly examined, is *C. ethalion*; but it is much more sericeous on the under surface, and its geographical distribution would assist in showing to which female of the white-banded species it belonged.

26. CHARAXES MANICA.

Q. Charaxes manica, Trimen, Proc. Zool. Soc. 1894, p. 43, pl. vi. fig. 9.

Var. ? Charaxes ephyra ♀, Dewitz, Nova Acta Akad. Naturf. Halle, vol. 50. no. 4, pl. xvii. fig. 11 (1887).

? a. Atbara, Abyssinia, ♂.

I am very doubtful about our male, and think it much more probable that the insect figured by Dewitz (loc. cit. fig. 10) is the true male of this species, and our example that sex of C. Dewitzi.

27. CHARAXES PHÆUS.

Q. Charaxes phæus &, Hewitson, Ent. Month. Mag. vol. xiv. p. 82 (1877); Trimen, South Afr. Butt. i. p. 344 (1887).

d. Charaxes alladinis, Butler in Proc. Zool. Soc. 1893, p. 648.

- a. Ngama's, Kakoma (R. Crawshay), &.
- b. Zomba (A. Whyte), J.
- c. Delagoa Bay,♀.
- d. Delagoa Bay (Monteiro), ♀; from S. & G. coll.

Type, e. Delagoa Bay (Monteiro), \circ .

The form of the male is exactly that of the female, and the two subapical spots on the primaries are very characteristic of the species; the secondaries are like those of Dewitz's male *C. ephyra*, excepting that the red marginal markings are strongly defined; below, male and female are almost absolutely alike.

28. CHARAXES CEDREATIS.

- ♀♀ (as sexes). Charaxes cedreatis, Hewitson, Ent. Month. Mag. x. p. 247 (1874); Exot. Butt. v. Char. pl. v. figs. 22-24 (1876).
 - ♂♀. Charaxes Carteri, Butler, Ent. Month. Mag. xviii. p. 108 (1881).

Types, a, b. Accra (E. T. Carter), β , φ .

- c. Croboe District, Accra (Hickling), &.
- d. Ashanti, J.
- e. West Africa, ♀.

Hewitson coll.

Type, f. Without locality, Q; (type of Hewitson's male).

g, h. Fernando Po, \mathcal{Q} .

The male has much the character of C. $viola\, \sigma$ on the upper surface, but the under-surface colouring is of a greyish-olive colour, precisely like that of the female: most of the pale borders to the lines also appear as in that sex, and especially the irregular whitish patch running to the abdominal margin above the anal angle.

29. CHARAXES ALLADINIS.

- Q. Charaxes alladinis, *Butler*, *Cist. Ent.* i. p. 5 (1869); *Lep. Exot.* i. pl. 10. fig. 2 (1870).
 - a. Ondo Country, Lagos (Sir G. Carter), &; from S. & G. coll.
 - Type, b. Locality not known (Druce coll.), ♀; from S. & G. coll.
 - c. West Africa, d.
 - d. Barombi, Cameroons (Dr. Preuss), ♂; from S. & G. coll.
 - e. Gaboon (Bates coll.), &; from S. & G. coll.

f. Without locality, Q.

With the sexes of this species before one there is no possibility of doubting their identity, the rosy flush over the whole under surface being very characteristic. Above, the male has the basal two-fifths of the primaries bronze-green, the costal border is also of the same colour; at equal distances between the cell and apex are three pale green spots nearly equidistant, and along the outer margin a series upon bronze-green nebulæ; the secondaries show scarcely a trace of red on the greenish marginal spots, the submarginal white spots are sharply defined, and within is a superciliary lunulate bronze-green streak (somewhat as in C. phæus 3, but nearer to outer margin).

30. Charaxes Hollandi.

♂, ♀. Charaxes Hollandi, Butler, Ann. & Mag. Nat. Hist. 6th ser. vol. xii. p. 266 (1893).

Types, a-d. Sierra Leone (Barchard), $\eth \ \eth$, Q.

e, f. Sierra Leone (Dr. Preuss), ♂,♀; from S. & G. coll.

g, h. Sierra Leone (P. Crowley), $\delta \delta$.

Hewitson coll.

i. Without locality, ♀.

Seasonal form.—The male more nearly resembling that sex of *C. etheocles* on the upper surface; the female with the unbroken part of the transverse band white shaded with silvery blue.

j, k. Sierra Leone (Dr. Preuss), δ , \mathfrak{P} ; from S. & G. coll.

Local form.—The male larger, with less defined markings towards costa of primaries and outer margin of secondaries; the female like the preceding form, but with the spots on the primaries white instead of buff, and the band across the secondaries wider.

l, m. Old Calabar (J. W. Cockburn), $3 \circ 2$.

31. CHARAXES ETHALION.

9. Charaxes ethalion, Boisduval, Voy. de Deleg. ii. p. 593 (1847).

Nymphalis erithalion, Westwood & Hewitson, Gen. Diurn. Lep. pl. 48. fig. 1 (1850).

Var. Charaxes Baumanni, Rogenhofer, Verhandl. z.-b. Ges. Wien, xli. p. 564 (1891).

Local form, C. Dewitzi, Butler, P. Z. S. 1895, p. 255.

♀. Charaxes alladinis ♂, Dewitz, Nova Acta Akad. Naturf. Halle, vol. 50. no. 4, pl. xvii. fig. 8 (1887).

a, b. Delagoa Bay (Monteiro), δ, ς .

Excepting that the marginal green and red markings on the secondaries are rather better developed, the male corresponds with that of the typical form.

Seasonal form of var. Dewitzi.—The male has lost the red marginal streaks on the secondaries, and the female has the band white partly bordered with silvery blue, nearly as in that sex of the typical form.

- c. Zomba (Macclounie), d.
- d. Delagoa Bay, ♀.

Typical C. ethalion.

- e, f. Kaffraria (Druce coll.), ♂, ♀; from S. & G. coll.
 - g. Durban (G. E. Shelley), ♀; from S. & G. coll.
 - h. Natal (Bates coll.), &; from S. & G. coll.
- i, j. Natal (Plant), δ, \circ .
 - k. Natal (Gueinzius), 3.
 - l. Zulu country (Angas), ♀.

Hewitson coll. (as C. ephyra).

m-o. Natal, ∂, \mathcal{Q} .

p, q. Without locality, δ, \circ .

Staudinger gives a poor figure of the male under the name of *C. ephyra*, a species from which there is not the least difficulty in distinguishing it.

I can make nothing more of *C. Baumanni* than a dwarfed female answering to our specimen from Zulu (*l, supra*).

32. Charaxes Hildebrandti.

Charaxes Hildebrandti, *Dewitz*, *Acta Ac. Nat. Cur.* xli. 2, p. 200, pl. ii. fig. 16 (1879).

Charaxes talagugæ, Holland, Trans. Am. Ent. Soc. xiii. p. 330, pl. viii. fig. 2 (1886).

a. Ondo country, Lagos (Sir G. Carter), &; from S. & G. coll.

This is an extraordinarily distinct and very beautiful species.

33. CHARAXES WHYTEI.

- 3. Charaxes Whytei, Butler, Proc. Zool. Soc. 1893, p. 649, pl. lx. fig. 2; \$\mathbb{Q}\$, 1895, p. 255.
- C. Charaxes Selousi, Trimen, Proc. Zool. Soc. 1894, p. 45, pl. vi. fig. 10.

- a, b. Zomba (A. Whyte), & &.
- c, d. Zomba (Macclounie), Q Q.
- e, f. Zomba (Consul A. Sharpe), 3, 9.

Since writing this paper, I have discovered that C. Thysii should be referred to this section of the genus.

5. C. ANTICLEA GROUP.

34. CHARAXES ANTICLEA.

Papilio anticlea, Drury, Ill. Ex. Ent. iii. pl. xxvii. figs. 5, 6 (1782). Papilio horatius, Fabricius, Ent. Syst. iii. 1, p. 64 (1793).

- a. Sierra Leone (Foxcroft), 3.
- b. Sierra Leone (Rev. D. F. Morgan), ♀.
- c. Sierra Leone (Stathard coll.), d.
- d. Without locality (coll. Kaden); from S. & G. coll.

Hewitson coll.

- e. Without locality, d.
- f. Angola, d.

Seasonal form. (Orange deeper, ocelli more numerous.) q. Sierra Leone (Druce coll.); from S. & G. coll.

Hewitson coll.

h, i. Angola, & d.

35. CHARAXES PROTOCLEA.

Charaxes protoclea, Feisthamel, Ann. Soc. Ent. France, 1850, p. 260.

- a, b. Barombi, Cameroons (Dr. Preuss), β, φ ; from S. & G.
- c-g. Cameroons, δ δ , \mathfrak{P} ; from S. & G. coll.
- h, i. Victoria, Cameroons (Druce coll.), & &; from S. & G.
- j, k. Cameroons, 3, 9.
 - l. Old Calabar (White), &; from S. & G coll.
 - m. Old Calabar (Druce coll.), 2; from S. & G. coll.
 - n. Ashanti, 3.
 - o. Without locality (coll. Kaden), ♀; from S. & G. coll.
- p, q. Sierra Leone (Dr. Preuss), Q, d; from S. & G. coll.

Hewitson coll.

- r. Old Calabar, d.
- s. Cameroons, d.
- t. Without locality, 2.

36. CHARAXES AZOTA.

- Q. Philognoma azota, Hewitson, Entom. Month. Mag. vol. xiv. p. 82 (1877).
- J. Charaxes azota, Butler, Ann. & Mag. Nat. Hist. ser. 6, vol. xv. p. 249 (1895).

Type, Delagoa Bay (Monteiro), &.

Local form: Charaxes calliclea, H. Grose Smith, Ann. & Mag. Nat. Hist. ser. 6, vol. iii. p. 130 (1889).

Mombasa.

Not in the British Museum collection, but intermediate in character between typical C. azota and the following:—

Local form: Charaxes nyasana, Butler, Ann. & Mag. Nat. Hist. ser. 6, vol. xv. p. 249 (1895).

Charaxes azota 3, Hewitson, Entom. Month. Mag. vol. xiv. p. 181 (1878).

a. Zomba (Macclounie), 3.

Hewitson coll.

b. Nyasa-land (Thelwall), &.

Now that I have seen Mr. Grose Smith's examples of his C. calliclea from Mombasa, I can no longer regard this form as more than a local race of C. azota, the differences in C. calliclea being such as partly to connect the two extremes. In all probability a series collected over the whole of Eastern Africa would supply all the links from one type to the other, but I do not doubt that the form of Delagoa Bay is constantly dissimilar from that of Nyasa-land, and therefore that distinctive names, by which these local races may be indicated, are a positive gain to the student.

6. C. LUCRETIUS GROUP.

37. CHARAXES LACTETINCTUS.

3. Charaxes lactetinctus, Karsch, Ent. Nachr. xviii. p. 113 (1892); Berl. ent. Zeit. xxxviii. p. 190, Taf. v. fig. 3 (1893).

Adeli.

Probably allied to C. lucretius, to judge from the under surface; above, it is more like C. candiope, but with the basal area bluish white, more after the fashion of C. varanes.

38. CHARAXES ODYSSEUS.

Q. Charaxes odysseus, Staudinger, Deutsche ent. Zeit., Lep. v. p. 260 (1892).

Island of St. Thomas, West Africa.

Said to be most like C. etesipe Q on the upper surface, but C. lucretius on the under surface. It is not in the Museum collection.

39. CHARAXES LUCRETIUS.

Papilio lucretius, Cramer, Pap. Exot. i. pl. lxxxii. figs. E, F (1779).

- a, b. Sierra Leone (Barchard), ♂,♀.
 - c. West Africa, &; from S. & G. coll.
- d, e. Isubu, \mathcal{J}, \mathcal{P} .
 - f. Cameroons, d; from S. & G. coll.
 - g. Monbuttu (Emin Pasha), ♀.
- h-j. Old Calabar, ♂ ♂; from S. & G. coll.
 - k. Old Calabar (White), &; from S. & G. coll.
- *l-n*. Fernando Po, Q Q, d; from S. & G. coll.
 - o. Ashanti, J.
 - p. Croboe District, Accra (Higlett), 3

Hewitson coll.

- q-s. Fernando Po, σ , φ φ .
 - t. Old Calabar, 3.
 - u. Angola, d.

40. CHARAXES CYNTHIA.

- J. Charaxes cynthia, Butler, Proc. Zool. Soc. 1865, p. 626, pl. xxxvi. fig. 3.
- Q. Charaxes lysianassa, Westwood, Thes. Oxon. p. 181, pl. xxxiv. figs. 3, 4 (1874).
 - a. Old Calabar (J. W. Cockburn), 3.
 - b. Old Calabar (White), ♀; from S. & G. coll.
 - c. West Africa, ♀.
 - d. Rio del Rey (H. H. Johnston), d.
 - e. Locality unrecorded (Coll. Kaden), &; from S. & G. coll.

Types, f, g. Ashanti, $\delta \delta$.

h. Victoria, Cameroons (Druce coll.), ♂; from S. & G. coll.

Hewitson coll.

i. Angola, ♀.

41. CHARAXES MACCLOUNII.

Charaxes Macclounii, Butler, Proc. Zool. Soc. 1895, p. 252, &, pl. xv. fig. 1.

a-d. Zomba (Macclounie), $\delta \delta, \mathcal{Q}$.

42. CHARAXES LASTI.

Charaxes Lasti, H. Grose Smith, Ann. & Mag. Nat. Hist. ser. 6, vol. iii. p. 131 (1889); J. Rhop. Exot. p. 8, pl. Char. iv. figs. 4, 5 (1890); Q. Trimen, Proc. Zool. Soc. 1894, p. 39, pl. v. fig. 6.

Mombasa, Pungwe Valley and Pungwe River.

a, b. Zomba, 3 3 (Consul A. Sharpe).

43. CHARAXES BOUETI.

Charaxes Boueti, Feisthamel, Ann. Soc. Ent. France, 1850, p. 261. Gambia.

From the description, this species would seem to be nearly allied to *C. candiope*, and I should have considered it merely a form of that species, only Mr. Feisthamel has omitted to mention the green veins on the under surface, which are especially characteristic of the *C. candiope* group. If a very distinct species, one would have supposed that it must have been received and recognized since 1850; nevertheless, from a drawing of the type shown to me by Mr. Aurivillius after I had completed this paper, I find that *C. Boueti* is nearly allied to *C. Lasti*.

7. C. CANDIOPE GROUP.

44. CHARAXES CANDIOPE.

Nymphalis candiope, Godart, Enc. Méth. ix. p. 353 (1819). Charaxes viridicostatus, Aurivillius, Œfv. Akad. Förh. xxxvi. (n. 7), p. 41 (1879).

- a. Nguru Hills, E. Africa, &; from S. & G. coll.
- b. Summit of Mt. Höhnel (Dr. Gregory), ♀.
- c. Delagoa Bay (Monteiro), 3; from S. & G. coll.
- d, e. Kaffraria (Druce coll.), of of; from S. & G. coll.
 - f. Durban (G. E. Shelley), Q; from S. & G. coll.
- g, h. Natal (Gueinzius), Q, d.
 - i. Natal (Plant), d.
 - j. Congo (Richardson), 3 var.
 - k. Angola (Monteiro), &; from S. & G. coll.
- l-n. Sierra Leone (Barchard), & &.
 - o. Sierra Leone (Dr. Preuss); from S. & G. coll.

Var. = probably typical viridicostatus.

p. Taita, E. Africa (J. A. Wray), &.

q. Zomba (Macclounie), Q.

Hewitson coll.

r, s. Natal, & d.

Var. t. Delagoa Bay, ♂.

u. Angola, ♀.

Local race?: C. thomasius, Staudinger, Exot. Schmett. p. 169 (1886).

Island of St. Thomas.

Staudinger describes the pattern as somewhat similar to that of *C. Cowani* (my description of which he has evidently overlooked, inasmuch as he describes it as a new species).

45. CHARAXES ANTAMBOULOU.

Charaxes antamboulou, Lucas, Ann. Sci. Nat. vol. xv. p. 1 (1872).

♂ as ♀. Charaxes antamboulou, Mabille, in Grand. Mad. p. 191, pl. 23. figs. 3, 4, var. (1885).

*Var. a, b. Madagascar, Fort Dauphin (M. J. Cloisel), δ δ . Typical, c. Ankafana, Betsileo (Rev. Deans Cowan), \circ .

Hewitson coll. (as C. candiope).

d, e. Madagascar, ♂ ♂.

The sexes of this species, as of the allied *C. candiope*, are alike on both surfaces, but the under surface varies considerably, as in the Continental species. Hewitson's two males and one female correspond exactly on both surfaces.

46. CHARAXES COWANI.

- ♂. Charaxes Cowani, Butler, Ann. & Mag. Nat. Hist. ser. 5, vol. ii.
 p. 285 (1878); ♀, ibid. vol. v. p. 336 (1880).
- 3. Charaxes antamboulou, Mabille (part.), in Grand. Mad. p. 191, pl. 23. figs. 1, 2 (1885).

Type, a. Fianarantsoa (Rev. Deans Cowan), 3.

b. Fianarantsoa (Rev. Deans Cowan), ♀.

c-e. Betsileo (Rev. Deans Cowan), & &; from S. & G. coll.

f. Madagascar, δ .

The female has a curious general resemblance to C. antamboulou on the upper surface, but the external area is blacker and

^{*} Corresponding with Mabille's figure of the supposed female, but primaries more falcate.

the apex of the primaries acuminate as in the male; on the under surface the pattern of the sexes closely corresponds and exhibits little variation. I do not know what to make of Mabille's second figure, but suspect it to be taken from a male of *C. antamboulou*.

47. CHARAXES ANALAVA.

Charaxes analava, Ward, Ent. Month. Mag. ix. p. 3 (1872); Mabille, in Grand. Mad. p. 194, pl. xxv. figs. 2, 2 a (1887).

a. Antananarivo (Kingdon), 3.

b-c. Madagascar (Druce coll.), Q, d; from S. & G. coll.

Hewitson coll.

d-g. Madagascar, ♂♂.

8. C. ZOOLINA GROUP.

48. CHARAXES BETANIMENA.

Charaxes betanimena, Lucas, Ann. Sci. Nat. vol. xv. art. 22, p. 3 (1872). Charaxes andriba, Ward, Entom. Month. Mag. ix. p. 210 (1873).

Q. Nymphalis Freyi, Brancsik, Jahresb. Ver. Trencsin, 1891, pl. 7.

a. Fort Dauphin (M. J. Cloisel), 3.

Herr Brancsik's figure is evidently made from an imperfect or distorted specimen.

49. CHARAXES NEANTHES.

Nymphalis neanthes, *Hewitson*, *Exot. Butt.* i. *Nymph.* pl. i. figs. 2, 3 (1854).

- a, b. Kaffraria (Druce coll.), & &; from S. & G. coll.
 - c. Natal (Bates coll.), Q; from S. & G. coll.
- d, e. Natal (Gueinzius), Q, d.
 - f. Natal (Plant), d.
- g-i. Delagoa Bay (Monteiro), ♂ ♂, Q; from S. & G. coll.
 - j. Lake Mweru (R. Crawshay), 3.
- k, l. Cameroons, \mathcal{P}, \mathcal{J} .

Hewitson coll.

m. Natal, ♂.

n-q. Without locality, σ , \circ \circ .

r. Delagoa Bay, \circ .

50. CHARAXES EHMCKEI.

Charaxes Ehmckei, Dewitz, Berl. ent. Zeit., Lep. xxvi. p. 382, pl. vii. fig. 4 (1882).

Hewitson coll. (as C. betanimena).

a-c. Angola, & &.

In colouring this species is intermediate between the *C. neanthes* and *C. zoolina* series: it is, however, remarkable on account of the development, in the male, of the tail at the extremity of the third median branch. I do not doubt that this species is one of the links connecting *Palla* with *Charaxes*, the upper-surface coloration of *C. Ehmckii* being very like that of *P. varanes*.

51. CHARAXES HOMEYERI.

Charaxes Homeyeri, Dewitz, Berl. ent. Zeit. xxvi. p. 382, pl. vii. fig. 3 (1882).

Angola.

Not in the Museum collection.

52. CHARAXES KAHLDENI.

Charaxes Kahldeni, Dewitz, Berl. ent. Zeit. xxvi. p. 381, pl. vii. figs. 1, 2 (1882).

Angola.

53. CHARAXES ZOOLINA.

Nymphalis zoolina, Doubleday & Hewitson, Gen. Diurn. Lep. pl. 53. fig. 1 (1850).

- a, b. Cameroons, δ , \circ .
 - c. Mamboia (Dr. Kirk), Q.
 - d. Nguru Hills, E. Africa, &; from S. & G. coll.
 - e. Slopes of Kilima-njaro (Hannington), J.
 - f. Victoria Nyanza (Hannington), J.
- g, h. Delagoa Bay (Monteiro), δ , \circ ; from S. & G. coll.
- *i*-k. Natal (Bates coll.), ♂, ♀♀; from S. & G. coll.
 - l. Natal (Gueinzius), Q.
- m, n. Natal (Plant), Q Q.

Hewitson coll.

- o-r. Delagoa Bay, ♂♂,♀♀.
 - s. Natal, Q.
 - t. Zambesi, d.

54. CHARAXES BETSIMISERAKA.

Charaxes betsimiseraka, Lucas, Ann. Sci. Nat. vol. xv. art. 22, p. 2 (1872); Mabille in Grand. Mad. p. 195, pl. xxi. figs. 2, 2 a (1887).

Not in the British Museum collection.

55. CHARAXES RELATUS.

Charaxes relatus, Butler, Ann. & Mag. Nat. Hist. ser. 5, vol. v. p. 394 (1880).

a, b. Fort Dauphin (M. J. Cloisel), ♂,♀.

Hewitson coll.

Type, c. Madagascar, d.

I believe, when perfect, the male of this species has a single tail like the nearly allied *C betsimiseraka*; both of the males in the Museum are probably mutilated.

56. CHARAXES NOBILIS.

Charaxes nobilis, Druce, Entom. Month. Mag. x. p. 13 (1873).

Charaxes agabo, Distant, Proc. Zool. Soc. 1879, p. 708, pl. liv. fig. 4.

Charaxes homerus, Staudinger, Deutsche ent. Zeit., Lep. p. 132, pl. ii. fig. 1 (1891).

Type, a. Old Calabar (coll. Druce); from S. & G. coll.

This grand species evidently belongs to the C. zoolina group.

9. C. JAHLUSA GROUP.

57. CHARAXES JAHLUSA.

Nymphalis jahlusa, *Trimen*, *Rhop. Afr. Austr.* i. p. 177 (1862), ii. p. 341, pl. iii. fig. 5 (1866).

- a, b. Cape of Good Hope (Layard), & &; from S. & G. coll.
 - c. S. Africa (Sir Andrew Smith), ♀.
 - d. Natal (Bates coll.), J; from S. & G. coll.
 - e. Natal (Druce coll.), &; from S. & G. coll.

Hewitson coll.

f, g. Cape of Good Hope, σ σ .

This is easily separable from *C. argynnides* by its paler ground-tint, less blackened apex and outer border, and the slightly less prominently sigmoidal outer margin to the primaries.

58. CHARAXES ARGYNNIDES.

Charaxes argynnides, Westwood, Proc. Ent. Soc. ser. 3, vol. ii. p. 10 (1864).

- a. Lake Nyasa (Cotterell), &; from S. & G. coll.
- b. Shire River (Bates coll.), Q; from S. & G. coll.
- c, d. Lake Tanganyika (C. Hore), & &.

Hewitson coll. (as C. jahlusa).

e, f. Zambesi, ♂,♀.

g. Nyasa, &.

Both this species and *C. jahlusa* have two types of marking on the under surface—the one type having the apical area of primaries and the whole of the secondaries with a whitish ground to the markings, the other with a brownish argillaceous ground: these differences are probably seasonal.

. 10. C. NICHETES GROUP.

59. CHARAXES LEONINUS.

Charaxes leoninus, Butler, Proc. Zool. Soc. 1895, p. 253, pl. xv. fig. 2.

a, b. Zomba (Macclounie), δ , \circ .

c-e. Zomba (Consul A. Sharpe), \eth , Q.

60. CHARAXES NICHETES.

Charaxes nichetes, H. Grose Smith, Ent. Month. Mag. xx. p. 58 (1883); Rhop. Exot. i. Char. pl. iv. figs. 1-3 (1890).

Charaxes hamatus, Dewitz, Ent. Nachr. x. p. 285 (1884); Nova Acta Leop.-Carol. Akad. Naturf. vol. 50. no. 4, pl. xvii. fig. 12 (1887).

Charaxes ogovensis, Holland, Trans. Am. Ent. Soc. xiii. p. 330, pl. viii. fig. 2 (1886).

Type, a. Cameroons, δ ; from S. & G. coll.

11. C. LAODICE GROUP.

61. CHARAXES ZELICA.

Charaxes zelica, Butler, Ent. Month. Mag. vi. p. 28 (1869); Lep. Exot. i. p. 12, pl. v. fig. 3 (1869).

Type, a. Ashanti?, 3.

62. Charaxes porthos.

Charaxes porthos, H. Grose Smith, Ent. Month. Mag. xx. p. 57 (1883); Rhop. Exot. i. Char. pl. i. figs. 4, 5 (1887).

Charaxes midas, Staudinger, Deutsche ent. Zeit., Lep. p. 135, pl. ii. fig. 4 (1891).

a. Old Calabar, 3; from S. & G. coll.

b. West Africa, &; from S. & G. coll.

63. CHARAXES MYCERINA.

Nymphalis mycerina, Godart, Enc. Méth. ix. p. 369 (1823); Lucas, Lep. Exot. pl. 65. fig. 2 (1835).

- a. Old Calabar (Swan), &; from S. & G. coll.
- b. Old Calabar (White), &; from S. & G. coll.
- c. Without locality, 2; from S. & G. coll.
- d, e. Cameroons, & &; from S. & G. coll.

- f, g. Cameroons, $\mathcal{J} \mathcal{J}$.
 - h. Victoria, Cameroons (Druce coll.), &; from S. & G. coll.
 - i. Barombi, Cameroons (Dr. Preuss), &; from S. & G. coll.
- j, k. Sierra Leone (Dr. Preuss), $\delta \delta$; from S. & G. coll.
 - l. Sierra Leone (Barchard), d.

- m, n. Cameroons, 3, 9.
 - o. Fernando Po, d.

64. CHARAXES NAUSICAA.

Charaxes nausicaa, Staudinger, Deutsche ent. Zeit., Lep. p. 137 (1891).

- a. Old Calabar (J. W. Cockburn), 3.
- b. "R. Ogowai" (? Ogooawai, Soudan), J.

This insect is so extremely close to *C. mycerina*, that it would not be at all surprising to find that it was an occasional sport of that species; it is almost too rare for a seasonal form. The chief differences are in the outline of the wings, the primaries having the costal margin less arched, the secondaries having the outer margin regularly dentate-sinuate: the pattern and colouring on both surfaces are nearly the same as in *C. mycerina*; but on the under surface the darker bandings are less clearly defined.

65. CHARAXES LAODICE.

Q. Papilio laodice, Drury, Ill. Exot. Ent. iii. pl. 26. figs. 1, 2 (1782).

Papilio lycurgus, Fabricius, Ent. Syst. iii. 1, p. 67 (1793).

- 3. Nymphalis nesiope, Hewitson, Exot. Butt. i. Nymph. pl. i. figs. 5, 6 (1854).
 - a. Old Calabar (Bates coll.), &; from S. & G. coll.
 - b. Old Calabar (Druce coll.), &; from S. & G. coll.
 - c. Old Calabar (J. W. Cockburn), J.
 - d. Barombi, Cameroons (Dr. Preuss), &; from S. & G. coll.
 - e, f. Isubu, \eth \eth .
 - g. Fernando Po, ♂; from S. & G. coll.
 - h. Lake Tanganyika (C. Hore), d.
 - i. Ambriz (Monteiro), &.

Hewitson coll.

- j. Cameroons, d.
- k, l. Angola, $\delta \delta$.

66. Charaxes thysii *.

Charaxes thysii, Capronnier, Comptes Rend. Soc. Ent. Belg. xxxiii.p. cxxv (1889).

Congo.

I have been quite unable to identify this species with anything we possess: it expands 2 inches, has the upper surface blackbrown with blue reflections; the primaries with a submarginal series of blue spots uniting at the submedian vein into a metallic blue band which runs parallel to the outer margin of secondaries: so far the description answers fairly to the male of *C. laodice*, but the secondaries are said to have two short tails. Under surface silvery white, with a continuous brown submarginal line sprinkled with black markings on the secondaries, the border of these wings being also brown, with little black lunules; there are also spots and little interrupted lines of black at the base of the primaries, and a large black-brown patch at external angle.

11. C. TIRIDATES GROUP.

67. CHARAXES IMPERIALIS.

- ♂. Charaxes imperialis, Butler, Trans. Ent. Soc. 1874, p. 531, pl. xi. fig. 3; ♀. Proc. Zool. Soc. 1887, p. 570.
 - a. Sierra Leone (Dr. Preuss), &; from S. & G. coll.
 - b. Rio del Rey (Johnston), \circ .

The male is labelled "Charaxes imperialis, Stgr. in litt." It is surprising how careless Dr. Staudinger is in looking up the authorship of a species; however carefully it may have been figured and described, it is still in danger of being redescribed as new: this is repeatedly the case in his 'Exotische Schmetterlinge.'

C. imperialis is at present very rare in collections; for thirteen years the type in Mr. Swanzy's collection was the only specimen known to me.

68. Charaxes Ameliæ.

- 3. Charaxes Ameliæ, Doumet, Rev. Zool. 1861, p. 171, pl. v. fig. 1; Hewitson, Exot. Butt. v. Char. pl. v. figs. 20, 21 (1876).
 - d. Charaxes regius, Aurivillius, Ent. Tidskr. x. p. 191 (1889).
 - a-d. Sierra Leone (Dr. Preuss), $\sigma \sigma$, φ ; from S. & G. coll. e-g. Sierra Leone (Barchard), $\varphi \varphi$.

^{*} Since this paper was written, a coloured drawing of the type has been shown to me by Mr. Aurivillius; the species is allied to C. Whytei.

- h, i. Sierra Leone (P. Crowley), δ, \circ .
 - j. Victoria, Cameroons (Druce coll.), &; from S. & G. coll.
 - k. Old Calabar (White), &; from S. & G. coll.
 - l. Old Calabar (Druce coll.), &; from S. & G. coll.
 - m. Accra (E. T. Carter), \mathfrak{P} .

- n. Old Calabar, d.
- o. Without locality, Q.

69. Charaxes pithodoris.

Charaxes pithodoris, Hewitson, Ent. Month. Mag. x. p. 57 (1873); Exot. Butt. iv. Char. pl. i. figs. 18, 19 (1874).

Charaxes pythodorus, Kirby, Cat. Diurn. Lep., Suppl. p. 478 (1877).

Charaxes nesæa, H. Grose Smith, Ann. & Mag. Nat. Hist. ser. 6, vol. iii. p. 132 (1889).

a, b. Lake Mweru (R. Crawshay), & d.

Hewitson coll.

Type, c. Angola (Rogers), δ .

This species, in the tailless character of the hind wings of the male, approaches the *C. mycerina* group; but the upper-surface pattern brings it nearer to *C. cithæron*.

70. CHARAXES CITHERON.

Charaxes eitheron, Felder, Wien. ent. Monatschr. iii. p. 398, pl. viii. figs. 2, 3 (1859).

a-c. Durban (G. E. Shelley), ♂ ♂, ♀; from S. & G. coll.

d-g. Natal (Gueinzius), ♂ ♂, ♀ ♀.

h, i. Natal (Plant), & &.

j. Natal (Bates coll.), J; from S. & G. coll.

k. Transvaal, \mathfrak{P} ; from S. & G. coll.

l-n. Zomba (A. Whyte & Macclounie), \mathcal{L} , \mathcal{L}

o. Slopes of Kilima-njaro (Hannington), d.

Hewitson coll.

p-s. Natal, ♂♂,♀♀.

71. CHARAXES SMARAGDALIS.

- 3. Charaxes smaragdalis, *Butler*, *Proc. Zool. Soc.* 1865, p. 630, pl. 36. fig. 5; Q. *Lep. Exot.* i. p. 5, pl. ii. fig. 1 (1869).
 - a. Sierra Leone (Druce coll.), &; from S. & G. coll.
 - b-d. Sierra Leone (Dr. Preuss), ♀, ♂ ♂; from S. & G. coll.
 - e-j. Sierra Leone (Barchard), ♂♂,♀♀.
 - k. Cameroons, d.

1-m. Cameroons, & &; from S. & G. coll.

n. Victoria, Cameroons (Druce coll.), 3; from S. & G. coll.

Type, o. Congo (Richardson), &.

Hewitson coll.

- p. Without locality, d.
- q. Congo, ♀ (example figured in 'Lep. Exot.').
- 72. CHARAXES PRINCEPS, sp. n.
- J. Differs from C. smaragdalis in the less produced, more truncated apex to the primaries, the outer margin almost straight; much shorter tails to secondaries; in colouring it is more violaceous; the blue band completely divided on the primaries to the first median branch and by two black spots on the interno-median interspace; secondaries with the first division of the blue band represented by a small isolated spot; border much less black, narrower, separating into occlloid spots from median vein; under surface more lilacine than in C. smaragdalis. Expanse 97 millim.
 - a. Victoria, Cameroons (Druce coll.), &; from S. & G. coll.
 - 73. CHARAXES MONTEIRI.

Charaxes Monteiri, Staudinger, Exot. Schmett. p. 168, pl. lix. (1886).

Isle of St. Thomas, Guinea.

Not in the Museum collection.

74. CHARAXES VIOLETTA.

Charaxes violetta, H. Grose Smith, Enton. Month. Mag. xxi. p. 247 (1885); Rhop. Exot. i. Char. pl. i. figs. 1-3 (1887).

- a. Delagoa Bay (Monteiro), 3.
- b. Zanzibar (Druce coll.), ♀; from S. & G. coll.
- 75. CHARAXES XIPHARES.
- Q. Papilio xiphares, Cramer, Pap. Exot. iv. pl. ccclxxvii. figs. A, B (1782).
 - 3. Papilio thyestes, Stoll, Suppl. Cram. pl. xxxii. figs. 2, 2 b (1790). Nymphalis thurius, Godart, Enc. Méth. ix. p. 354 (1823).

Nymphalis thieste, Westwood, Gen. Diurn. Lep. p. 307 (1850).

- a. South Africa (F. P. Mansel Weale), 3.
- b, c. South Africa (Sir Andrew Smith), Q Q.

Hewitson coll.

- d, e. Without locality, Q Q.
 - f. Cape of Good Hope, \mathfrak{P} .

76. CHARAXES NUMENES.

Nymphalis numenes, Hewitson, Exot. Butt. ii. Nymph. pl. ii. figs. 9-11 (1859).

- a. West Africa, o; from S. & G. coll.
- b. West Africa, ♀.
- c, d. Without locality (coll. Kaden), \emptyset , \emptyset ; from S. & G. coll.
 - e. Old Calabar, &; from S. & G. coll.
 - f. Cameroons (Druce coll.), \mathfrak{Q} ; from S. & G. coll.
- g, h. Sierra Leone (Dr. Preuss), & &; from S. & G. coll.
 - i. Sierra Leone (Barchard), ♀.
 - j. Accra, 3.
 - k. Accra (E. T. Carter), d.
- l, m. Croboe District, Acera (Higlett), & &.

Hewitson coll.

Type, n. Sierra Leone, J.

- o, p. Angola, & d.
 - q. Fernando Po, Q.

77. CHARAXES TIRIDATES.

- J. Papilio tiridates, Cramer, Pap. Exot. ii. pl. clxi. figs. A, B (1779).
- Q. Papilio marica, Fabricius, Ent. Syst. iii. 1, p. 113 (1793).

Var., Charaxes mixtus, Rothschild, Novit. Zool. i. p. 536, pl. xii. fig. 8 (1894).

- a. Sierra Leone (Dr. Preuss), &; from S. & G. coll.
- b, c. Sierra Leone (Plant), \mathcal{D} , \mathcal{J} .
 - d. Sierra Leone (P. Crowley), 3.
- e, f. West Africa, \mathcal{F} , \mathcal{F} ; from S. & G. coll.
 - g. Accra (R. Trimen), 3.
 - h. Accra (E. T. Carter), Q.
 - i. Lake Mweru (R. Crawshay), d.
 - j. Isubu, 3.
- k, l. Ashanti, & &.

Var. mixtus, Roths.

m, n. Victoria, Cameroons (*Druce coll.*), \mathcal{J}, \mathcal{D} ; from S. & G. coll.

Larger than the type from the Congo. There can be no doubt, I think, that the prominence of the white centres to the blue spots, unless proved to be peculiar to one locality only, can hardly indicate even a distinct race. Mr. Rothschild insists that the true female of *C. mixtus* resembles the male!

Hewitson coll. (normal type).

o, p. Without locality, \mathcal{E} , \mathcal{Q} .

q, r. Sierra Leone, 3 3.

78. CHARAXES BIPUNCTATUS.

Charaxes bipunctatus, Rothschild, Novit. Zool. i. p. 536 (1894).

a. Croboe District, Accra (Higlett), J.

This appears to be distinct from *C. tiridates*, but is very nearly allied: the absence of tails, the glossy greenish blue of the upper surface, and the deep orange marginal spots are its best characters; the absence of some of the blue spots is less important.

79. CHARAXES BOHEMANI.

- ♂. Charaxes Bohemani, Felder, Wien. ent. Monatschr. iii. p. 321, pl. vi. fig. 3 (1859); ♀. Butler, Lep. Exot. i. pl. x. fig. 3 (1870).
 - a-c. Angola (Monteiro), & &; from S. & G. coll.
 - d. Angola (Bates coll.), ♀; from S. & G. coll.
 - e. Banks of the Congo (Monteiro), 2.
 - f. Bembe (Monteiro), J.
 - g. Ngama's (R. Crawshay), d.
 - h. Lake Mweru (R. Crawshay), 3.
 - i, j. Zomba (Macclounie), 3 3.
 - k. Kandera (Emin Pasha), J.
 - 1. Mamboia (Dr. Kirk), ♀; from S. & G. coll.
 - m. S. Salvado (Grandy), 2; from S. & G. coll.

Hewitson coll.

- n, o. Zambesi, \mathcal{J}, \mathcal{Q} .
- p, q. Without locality, $\delta \delta$.

12. C. EUPALE GROUP.

80. CHARAXES EUPALE.

Papilio eupale, Drury, Ill. Exot. Ent. pl. vi. fig. 3 (1782). Papilio amasia, Fabricius, Ent. Syst. iii. 1, p. 136 (1793).

- a-d. Ashanti, 3, 3, 9.
 - e. Ashanti (Horniman coll.), d.
- f, g. Croboe District, Accra (Higlett), & &
 - h. W. Africa (J. Macgillivray), 3.
 - i. Angola, Bembe mines (Monteiro), d.
 - j. Angola (Rogers); from S. & G. coll.

- k, l. Sierra Leone (Barchard), & &.
 - m. Barombi, Cameroons (Dr. Preuss); from S. & G. coll.
- n, o. Cameroons; from S. & G. coll.

- p, q. Without locality, $\delta \delta$.
 - r. Cape Coast, 3.
 - s. Angola, d.

13. C. DELPHIS GROUP.

81. CHARAXES DELPHIS.

Charaxes delphis, Doubleday, Ann. Soc. Ent. France, 1843, p. 217, pl. 7.

Charaxes concha, Vollenhoven, Tijd. voor Ent. iv. p. 162, pl. x. figs. 1 & 3 (1861).

- a. Labuan (Low), &; from S. & G. coll.
- b, c. Borneo (Low), δ δ ; from S. & G. coll.
 - d. Borneo (Bates coll.), J; from S. & G. coll.
 - e. Palawan (Dr. Platen), &; from S. & G. coll.
 - f. Malacca (Bates coll.), &; from S. & G. coll.
- q-i. Silhet (Stainsforth), ♂ ♂.

Hewitson coll.

j-l. Without locality, $\delta \delta$.

It seems strange that all the specimens of this species which come to hand are males.

14. C. EUDAMIPPUS GROUP.

82. CHARAXES DOLON.

Charaxes dolon, Westwood, Cab. Orient. Ent. pl. xxvii. figs. 2, 3 (1848).

- a-d. Darjiling (Lidderdale), ♂ ♂; from S. & G. coll.
- e, f. Sikhim (G. C. Dudgeon), & &.
 - g. Sikhim (Watson), 3.
 - h. N. India (Capt. Boyes), d.
- i, j. Nepal (General Ramsay), δ δ .

Hewitson coll.

k-n. Without locality, δ δ .

In this species also, females would appear to be extremely rare. All that I have seen are males.

83. CHARAXES EUDAMIPPUS.

Charaxes eudamippus, Doubleday, Ann. Soc. Ent. France, 1843, p. 217, pl. vii.

Types, a, b. Silhet (Stainsforth), δ , \mathfrak{P} .

- c. Silhet (Stainsforth), d.
- d. Darjiling (H. J. Elwes), &; from S. & G. coll.
- e. Darjiling (Bates coll.), &; from S. & G. coll.
- f. Mungphu (Atkinson), J.
- g. Bhutan (G. C. Dudgeon), J.
- h. Nepal (Wright), d.
- i. Khasia Hills (Col. Swinhoe), &.
- j. Meetan, Burmah (A. O. Hume), &; from S. & G. coll.
- k. Tilin Yaw (Watson), d.
- 1. East Pegu (W. Doherty), J; from S. & G. coll.

Hewitson coll.

m-q. Without locality, $\mathcal{J} \mathcal{J}$, \mathcal{D} .

It is a great pity that Hewitson did not preserve the locality on his female specimen, that sex being very rare in collections.

84. CHARAXES NEPENTHES.

Charaxes nepenthes, H. Grose Smith, Enton. Month. Mag. vol. xx. p. 58 (1883); Rhop. Exot., Char. pl. ii. figs. 3, 4 (1887).

a, b. Salween River, Shan States, Burmah (Miss Rose Jackson), 3 3.

85. CHARAXES ROTHSCHILDI.

Charaxes ganymedes, Leech, Entomologist, vol. xxiv. Suppl. p. 30 (1891), not Staudinger.

Charaxes Rothschildi, Leech, Butt. China, i. p. 128, pl. xiv. fig. 3 (1893).

Omei-shan and Moupin.

18.

Not in the British Museum collection. It differs from *C. eudamippus* just as *C. mandarinus* does from *C. narcœus*, therefore it would not be surprising if we were to receive intergrades from one to the other. Mr. Leech renamed his species on the ground that Westwood had already used the name for a species of *Charaxes*! but Westwood (*loc. cit.*) gave the name *ganymede* (sic) to a Morpho, not a Charaxes. It was Staudinger who in 1886 used the name for a Charaxes.

86. CHARAXES NARCÆUS.

Nymphalis narcæus, Hewitson, Exot. Butt. i. Nymph. pl. i. figs. 1, 4 (1854).

Var., Charaxes mandarinus, Felder, Reise der Nov., Lep. iii. p. 437 (1867).

Charaxes narcæus, var. thibetanus, Oberthür, Études d'Ent. xv. p. 11, pl. ii. fig. 10 (July 1891).

Charaxes satyrina, Butler, var. menedemus, Oberthür, l. c. p. 13, pl. ii. fig. 9.

a, b. Shanghai (W. B. Pryer), & &; from S. & G. coll.

c. North China, ♀.

Type, d. Shanghai (Fortune), &; "Chekiang," Hew.

e-h. Kiukiang (Chas. Maries), ♂ ♂.

Hewitson coll.

i. China, ♀.

Var. mandarinus = thibetanus.

j, k. North China (Fortune), & d.

1. North China, J.

Hewitson coll.

m. Without locality, d.

n. China, Q.

M. Oberthür's C. menedemus is typical C. narcœus and C. thibetanus typical C. mandarinus. I was not aware that I had given the name C. satyrina to any Charaxes, but M. Oberthür (instead of looking up the Zoological Records) seems to have been perfectly satisfied to accept a manuscript name attached to a specimen by a dealer (see Leech in Butt. China, p. 127).

87. CHARAXES POSIDONIUS.

Charaxes posidonius, Leech, Entomologist, vol. xxiv., Suppl. p. 30 (May 1891); Butt. China, i. p. 127, pl. xiv. fig. 4 (1893).

Charaxes clitiphron, Oberthür, Études d'Ent. xv. p. 12, pl. ii. fig. 11 (July 1891).

Wa-ssu-kow and Ni-tou,

Not in the Museum collection.

15. C. HADRIANUS GROUP.

88. CHARAXES HADRIANUS.

Charaxes hadrianus, Ward, Ent. Month. Mag. viii. p. 120 (1871).

Charaxes gabonica, Crowley, Trans. Ent. Soc. p. 553, pl. ii. fig. 1 (1891).

Gaboon.

Not in the Museum collection.

16. C. ATHAMAS GROUP.

89. CHARAXES JALYSUS.

Charaxes jalysus, Felder, Reise der Nov., Lep. iii. p. 438, pl. lix. fig. 5 (1867).

- a-d. Borneo (Low), \eth \eth ; from S. & G. coll.
 - e. Sarawak (Everett), &; from S. & G. coll.
 - f. Perak (Townsend), J; from S. & G. coll.
- g, h. Malacca (Capt. Pinwill), & &.

This is a very distinct species which has been incorrectly associated with the *C. hebe* group; it really belongs to the opposite end of the series of species allied to *C. athamas*, the bordering of the wings on the under surface being narrowest in this species.

90. CHARAXES BHARATA.

Charaxes bharata, Felder, Reise der Nov., Lep. iii. p. 438 (1867).

- a. Dharmsala (Hocking), d.
- b. East India (Dohrn, Zeller coll.), ♀.
- c. Darjiling (Lidderdale), 3; from S. & G. coll.

The evident rarity of this form is rather suspicious; but it differs in so many respects from *C. athamas* that, without positive evidence, it would be presumptuous to regard it as a variety of that species: in its much narrower dark borders it is considerably nearer to *C. jalysus*.

91. CHARAXES HAMASTA.

Eulepis hamasta, Moore, Proc. Zool. Soc. 1882, p. 238. Charaxes agrarius, Swinhoe, l. c. 1886, p. 425, pl. xl. fig. 3.

Types, a, b. Dharmsala (*Hocking*), δ, \circ .

- c. India (coll. Banks), d.
- d. Mhow (Col. Swinhoe), 3.
- e, f. Tilin Yaw (Watson), & &.
 - g. Chin Hills (Watson), 3.

We next come to a form corresponding closely with *C. athamas* in pattern, and which I therefore regard as a variety of that species, but which, from the pale greenish-yellow colouring of the central area above, has been confounded with the narrow-bordered *C. bharata*.

92. CHARAXES ATHAMAS.

Papilio athamas, Drury, Ill. Exot. Ent. i. pl. ii. fig. 4 (1773).

Var. a. Charaxes samatha, Moore, Proc. Zool. Soc. 1878, p. 831.

Var. b. Charaxes attalus, Felder, Reise der Nov., Lep. iii. p. 438 (1867).

Charaxes Fruhstorferi, Röber, Ent. Nachr. xxi. n. 4, p. 63 (1895).

Charaxes phrixus, Röber, l. c. p. 64.

- Var. 1. Resembling typical form, but with central band above pale greenish yellow as in *C. bharata*.
 - a. Assam (Watson), d.
 - b. Nepal (Dr. Wright), \circ .
 - c. Khasia Hills (Watson), d.
 - d. Sikhim (Watson), J.
- Var. 2. Intermediate between var. 1 and typical form, the band above yellow but broad, inner apical spot large and quadrate.
 - a. Káli valley, N.W. India (J. F. Duthie), J.
 - b. Landoor (General Hearsay), 3.
 - c. Darjiling (H. J. Elwes), &; from S. & G. coll.
 - d. Kullar, Nilghiris (Davison), &; from S. & G. coll.
 - e. Kandy (Major Yerbury), ♀.
 - f. Ceylon (Major Yerbury), 3.

Hewitson coll.

g, h. Simla, & d.

Var. 3. Typical. (Drury's type was from China.)

- a. Nepal (Dr. Wright), &.
- b. Darjiling (Lidderdale), &; from S. & G. coll.
- c. Mylang River (Dr. G. Watt), d.

Var. 4. C. samatha, Moore.

a. Upper Tenasserim (Wood-Mason), 3.

b-e. Tilin Yaw (Watson),♀,♂♂.

f. Rangoon (J. G. Scott), d.

g. Rangoon (Cowen), d.

h. Andamans (Commander A. Carpenter), &.

i. Ceylon (Jameson), 3.

j, k. Ceylon (Col. Yerbury), & &.

l. Ceylon (Whyte), &; from S. & G. coll.

m-o. Philippines (Dr. Platen), ♂ ♂; from S. & G. coll.

p, q. Philippines (Semper), & &; from S. & G. coll.

Philippine examples have the submarginal red spots on the secondaries better developed than in those from Burma and Ceylon.

Var. 5. C. attalus, Felder.

- a. Borneo, \mathcal{F} .
- b. Sarawak (Everett), J; from S. & G. coll.
- c-e. Labuan (Low), δ δ ; from S. & G. coll.
 - f. Sumatra (Sachs), &; from S. & G. coll.
 - g. Perak (Townsend), &; from S. & G. coll.
- h-o. Java (Horsfield), $\delta \delta$, Q Q.

Bornean examples approach very closely to typical *C. samatha*; those from Sumatra and Java have the central band usually yellower, and most examples have two subapical spots on the primaries.

93. Charaxes alphius.

Charaxes alphius, Staudinger, Exot. Schmett. p. 172 (1886).

- a, b. Timor (from Staudinger), & &; from S. & G. coll.
 - c. Timor (Wallace), J; from S. & G. coll.
- d, e. Sambawa (Staudinger), & &; from S. & G. coll.

Nearly allied to the Javan form of C. athamas, but the inner subapical spot geminate.

94. CHARAXES ARJA.

Charaxes arja, Felder, Reise der Nov., Lep. iii. p. 438 (1867). Papilio pyrrhus, Donovan, Ins. Ind. pl. 29. fig. 3 (1800).

- a. Landour (Lidderdale), &; from S. & G. coll.
- b-e. Silhet (Sowerby), $\delta \delta$, φ .
 - f. Darjiling (Lidderdale), &; from S. & G. coll.
- g, h. Sikhim (G. C. Dudgeon), & &.
 - i, j. Sikhim (G. F. Hampson), & &; var. pyrrhus, Don.
 - k. Moulmein (Clark), Q.
- 1, m. Rangoon (Watson), d.
- n, o. Rangoon (Cowen), & &; from S. & G. coll.
 - p. Thayetmyo (Watson), d.
 - q. Toungoo (Watson), 3.
- r, s. Tilin Yaw (Watson), & d.
 - t. Karen Hills (Watson), d.

Var. with narrower black borders: less brown at base.

- u. Darjiling (Lidderdale), &; from S. & G. coll.
- v. Darjiling (Mrs. R. V. Boyle), d.

Hewitson coll.

- w. Silhet, 3.
- x. Cherra Poonjee, δ ; white band very narrow (nearly resembles g).

95. CHARAXES FALLAX.

Charaxes fallax, $R\ddot{o}ber$, Entom. Nachr. xx. n. 19, p. 294 (1894). Charaxes javanus, $R\ddot{o}ber$, l. c. xxi. p. 66 (1895).

a. Java? (J. Reeves), 3.

Var. C. javanus. (See Swainson's Zool. Ill. 2nd ser. xi. pl. 90.) The type is evidently a starved specimen.

- b. Java, J.
- c. Java (Wallace), &; from S. & G. coll.

Herr J. Röber admits that these two forms, which scarcely differ, certainly fly together; "whereby the independence of both forms is evidenced," he says. I should have thought the fact clearly proved their specific identity. Herr Frühstorfer thinks that our examples are not true C. javanus, and that the latter is a synonym of C. Moorei; he, however, writes from memory, but the two species are certainly very nearly related.

96. CHARAXES MOOREI.

Charaxes Moorei, Distant, Rhop. Malay. p. 108, pl. xiii. fig. 3 (1883). Charaxes kaba, Kheil, Fauna Indo-Malay. Arch. p. 27, pl. iii. (1884). Charaxes heracles, Röber, Entom. Nachr. xx. n. 19, p. 294 (1894).

- a, b. Borneo (Low), & &; from S. & G. coll.
 - c. Sumatra (Sachs), 3; from S. & G. coll.
 - d. Moulmein (Clark), 3.

Hewitson coll.

- e. Borneo, 3.
- f. Burma, Q.

Kheil's figure certainly appears to me to be a good representation of this species, and therefore I follow Mr. Distant in placing it as a synonym.

97. CHARAXES HEBE.

- Q. Charaxes hebe, Butler, Proc. Zool. Soc. 1865, p. 634, pl. xxxvii. fig. 3.
 - d. Charaxes albanus, Röber, Entom. Nachr. xxi. n. 4, p. 66 (1895).

Var. & Charaxes ganymedes, Staudinger, Exot. Schmett. p. 173 (1886).

a-c. Malacea (Pinwill), $\sigma \sigma$, φ .

d, e. Borneo (Low), \eth δ .

Type, f. Sumatra, ♀.

Hewitson coll.

g. Sumatra, & (agrees with description of C. albanus).

I have seen a typical example of *C. ganymedes* from W. B. Pryer's collection; it is merely a slight melanism of the type form.

17. C. KADENII GROUP.

98. CHARAXES KADENII.

Charaxes Kadenii, Felder, Wien. ent. Monatschr. iv. p. 232, pl. iii. fig. 2 (1860).

Type, a. Without locality (Kaden coll.), &; from S. & G. coll.

b. W. Java (Staudinger), 3; from S. & G. coll.

Hewitson coll.

c. Java, d.

This species seems to be a type intermediate between the C. athamas and C. Schreiberi groups.

18. C. Schreiberi Group.

99. CHARAXES SCHREIBERI.

Nymphalis Schreiberi, Godart, Enc. Méth. ix. Suppl. p. 825 (1823). Paphia Schreibers, Horsfield, Cat. Lep. E. I. Comp. pl. vi. figs. 3, 3 a (1829).

- a-c. Malacca (Pinwill), ♂ ♂.
 - d. Sumatra (Sachs), ♀; from S. & G. coll.
 - e. Billiton I. (Walter), ♀; from S. & G. coll.
 - f. Java (Druce coll.), \mathfrak{P} ; from S. & G. coll.
 - g. Java (Horsfield), Q.
 - h. Labuan (Low), &; from S. & G. coll.
 - i. India, o; from S. & G. coll.
 - j. Assam (Warwick), J.

Hewitson coll.

k. Java, J.

l, m. Borneo, & &.

100. Charaxes niasicus.

Charaxes niasicus, Butler, Ent. Month. Mag. xx. p. 50 (1883).

a. Isl. of Nias (Dr. A. Schreiber), 3.

101. CHARAXES COGNATUS.

Charaxes cognatus, Vollenhoven, Tijd. voor Ent. iv. p. 159, pl. ix. figs. 1, 2 (1861).

Moluccas.

Not in the Museum collection.

19. C. PYRRHUS GROUP.

102. CHARAXES PYRRHUS.

Papilio pyrrhus, Linnæus, Mus. Lud. Ulr. p. 205 (1764); Clerck, Icones, pl. 25. fig. 2 (1764).

Nymphalis pyrrhus, Lucas, Lep. Exot. pl. 63. fig. 2 (1835).

- a. Amboina, d.
- b. Without locality (coll. Kaden), \(\sigma\); from S. & G. coll.
- c. Amboina (Bates coll. from Wallace), &; from S.& G.coll.

103. CHARAXES JUPITER.

Charaxes jupiter, Butler, Lep. Exot. i. p. 14, pl. v. figs. 4, 7 (1869). Var., Charaxes attila, Grose Smith, Entom. Month. Mag. xxv. p. 301 (1889); Rhop. Exot. i. Char. pl. v. figs. 1, 2 & (1891).

- a-d. Port Moresby, N. Guinea (Goldie), & &; from S. & G. coll.
 - e. Duke of York Island, &.
 - f. Duke of York Island (G. Brown), δ ; from S. & G. coll. g-i. Guadalcanar (Woodford), Q Q; from S. & G. coll.

The differences pointed out by Mr. Grose Smith to distinguish C. attila from C. jupiter are only such as occur between specimens of C. sempronius.

104. CHARAXES GALAXIA.

Charaxes galaxia, Butler, Proc. Zool. Soc. 1865, p. 633, pl. xxxvii. fig. 2; Grose Smith, Rhop. Exot. i. Char. pl. ix. figs. 3, 4 (1891).

- a-c. Timor (Wallace), ♂ ♂; from S. & G. coll.
 - d. Locality unrecorded, δ ; from S. & G. coll.

Types, e, f. Timor (Wallace), δ δ .

Hewitson coll.

g, h. Timor (Wallace), $\delta \delta$.

105. CHARAXES GILOLENSIS.

Charaxes gilolensis, Butler, Lep. Exot. i. p. 14, pl. v. fig. 6, pl. vi. fig. 3 (1869).

- "Gilolo and Batchian."
- a. Batchian (Dr. Platen), &; from S. & G. coll.

Hewitson coll.

Type, b. Batchian (Wallace), d.

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106. CHARAXES SEMPRONIUS.

Papilio sempronius, Fabricius, Ent. Syst. iii. 1, p. 62 (1793).

Jasia australis, Swainson, Zool. Ill., Ins. ii. pl. 114 (1833).

Var., Charaxes tyrtæus, Felder, Wien. ent. Mon. iii. p. 399, pl. ix. fig. 3 (1859).

- a. N.E. Australia (J. Brenchley), &.
- b. Rockingham Bay (Macgillivray), ♀.
- c. Queensland (Macleay), &; from S. & G. coll.
- d. Moreton Bay (Bates coll.), ♀; from S. & G. coll.
- e. Sydney (Macleay), &; from S. & G. coll.
- f, g. Without locality (coll. Kaden), $\delta \delta$; from S. & G. coll. Var. $tyrt \alpha us$, h. Sydney (Macleay), \mathfrak{P} ; from S. & G. coll.
 - i. South Creek, New Holland (J. Hunter), J.
 - j. South-east Australia (E. Damel), J.
 - k, l. South-east Australia (Stutchbury), δ, ς .

Hewitson coll.

- m, n. Without locality, δ , φ .
 - o. Australia, ♀.

107. CHARAXES CLITARCHUS.

Charaxes clitarchus, Hewitson, Exot. Butt. v. pl. iv. figs. 16, 17 (1874).

a. Lifu (Rev. S. J. Whitmee), J.

b-d. New Caledonia (Layard), ♂ ♂; from S. & G. coll.

Hewitson coll.

Type, e. New Caledonia, δ (no locality label on specimen).

108. CHARAXES CAPHONTIS.

Ç. Charaxes caphontis, Hewitson, Exot. Butt. iii. Char. pl. iii. figs. 14, 15 (1862).

Hewitson coll.

Type, a. Port Denison, Australia, ♀.

109. Charaxes epigenes.

Charaxes epigenes, Godman & Salvin, Ann. & Mag. Nat. Hist. ser. 6, vol. i. p. 210 (1888).

a-d. Aola, Guadalcanar (Woodford); from S. & G. coll.

20. C. NITEBIS GROUP.

110. CHARAXES NITEBIS.

Nymphalis nitebis, Hewitson, Exot. Butt. ii. Nymph. pl. ii. figs. 7, 8 (1859).

- a, b. Celebes (coll. Druce), & &; from S. & G. coll.
- c, d. Minahassa, Celebes, \(\varphi \), \(\delta \); from S. & G. coll.
 - e. Macassar, Celebes (Wallace), d.

Hewitson coll.

f, g. Celebes (Wallace), δ δ .

h. Without locality, d.

This species forms a good transitional form from the *C. pyrrhus* to the *C. psaphon* group, which is rather interfered with by the necessity for putting *C. Durnfordi* next to it; there must always be these drawbacks to a linear arrangement of species.

21. C. Durnfordi Group.

111. CHARAXES DURNFORDI.

Charaxes Durnfordi, *Distant, Entom.* xvii. p. 191 (1884); *Rhop. Mal.* p. 432, pl. xl. fig. 8 (1886).

Local form. Charaxes Nicholii, Grose Smith, Ann. & Mag. Nat. Hist. ser. 5, vol. xviii. p. 150 (1886); Rhop. Exot. i. Char. pl. ii. figs. 1, 2 (1887).

a. E. Pegu (W. Doherty), &; from S. & G. coll.

112. CHARAXES EVERETTI.

Charaxes Everetti, Rothschild, Deutsche ent. Zeit., Lep. vi. p. 348 (1893). Baram, British North Borneo.

The Bornean representative of the preceding species.

113. CHARAXES STAUDINGERI.

Charaxes Staudingeri, Rothschild, Deutsche ent. Zeit., Lep. vi. p. 349 (1893).

Java.

Represents C. Durnfordi in Java.

22. C. PSAPHON GROUP.

114. CHARAXES ANTONIUS.

Charaxes antonius, Semper, Verh. Ver. Hamburg, iii. p. 113 (1878); Reisen in Arch. Phil., Tagf. pl. xiv. figs. 6-8 (1887).

- a-c. S.E. Mindanão (Dr. Platen), ♂♂,♀; from S. & G. coll.
 - d. Mindanão, d.

Hewitson coll.

- e. Philippines, d.
- f. Without locality, d.

115. CHARAXES PLATENI.

Charaxes Plateni, Staudinger, Deutsche ent. Zeit., Lep. p. 82 (1889).

a. Palawan, Philippines (Dr. Platen), ♂; from S. & G. coll.

The upper surface of this species is much like C. psaphon, but the tawny basal area of the primaries is smaller: the under surface is exceptionally white for this group.

116. CHARAXES PSAPHON.

- J. Charaxes psaphon, Westwood, Cab. Orient. Ent. pl. xxi. figs. 1, 2 (1848).
- \bigcirc . Charaxes serendiba, *Moore*, *Lep. Ceyl.* i. p. 30, pl. xv. fig. 3 (1880).
 - a, b. Trincomali (Col. Yerbury), δ , \circ .
 - c-h. Kandy (Col. Yerbury), ♂♂,♀.
 - i, j. Ceylon (Mrs. Lindesay), δ , \circ .
 - k, l. Ceylon (Whyte), & &; from S. & G. coll.
 - m, n. Ceylon (Jameson), 3 3.

Local race: Charaxes imna, Butler, Trans. Ent. Soc. 1870, p. 122, pl. iv. fig. 2.

- o, p. Nilgiris (Hampson), \eth , \updownarrow .
 - q. Bombay, J; from S. & G. coll.
 - r. Bombay (Hunter), \circ .
 - s. Bombay (Dr. Leith), d.

Hewitson coll.

t. Calcutta, 3.

117. CHARAXES HIERAX.

Charaxes hierax, Felder, Reise der Nov., Lep. iii. p. 442 (1867). Charaxes Watti, Butler, Proc. Zool. Soc. 1880, p. 148, pl. xv. fig. 2.

- a. China (coll. Kaden), d; from S. & G. coll.
- b. N. India, &; from S. & G. coll.
- Type, c. Upper Assam (Dr. Watt), &.
 - d. Silhet (Stainsforth), 3.

118. CHARAXES HARPAX.

Charaxes harpax, Felder, Reise der Nov., Lep. iii. p. 444 (1867). Charaxes agna, Moore, Proc. Zool. Soc. 1878, p. 832.

- a-h. Borneo (Low), $\eth \eth$, Q Q; from S. & G. coll.
 - i. Borneo (Bates coll.), &; from S. & G. coll.

- j, k. Borneo, $\mathcal{J} \mathcal{J}$.
- l, m. Sarawak (Everett), & &; from S. & G. coll.
 - n. Sarawak (Brooke), J.
 - o. Sumatra (Sachs), d; from S. & G. coll.
 - p. East Pegu (W. Doherty), &; from S. & G. coll.

Type, q. Upper Tenasserim (Wood-Mason), 3.

- r. Assam (Dr. Watt), d.
- s. Silhet (Stainsforth), 3.

Hewitson coll. (as C. affinis).

t. Borneo, 3.

119. CHARAXES BAYA.

Charaxes baya, Moore, Cat. Lep. E. I. Co. i. p. 207 (1857); J. Butler, Proc. Zool. Soc. 1865, pl. xxxvii. fig. 5.

Types, a, b. Java (Horsfield coll.), 3, 9.

- c-e. Sarawak (Everett), ♂; from S. & G. coll.
 - f. Sarawak (Bartlett), d.
- g-i. Borneo (Low), \eth \eth ; from S. & G. coll.

The following is, perhaps, only a form of *C. baya* occurring in Burma, the Philippines, &c.

120. Charaxes corax.

Charaxes corax, Felder, Reise der Nov., Lep. iii. p. 444 (1867).

- a. Moulmein (Archdeacon Clark), &.
- b. Mergui (Commander Alfred Carpenter), 3.
- c-e. Tenasserim (Capt. Chas. Bingham), & d.
 - f. Philippines (Druce coll.), &; from S. & G. coll.

Var., q. Elephant Island (Rev. Deans Cowan), &.

Dwarfed form = C. bayula, Staud. in litt.

h, i. Palawan (Dr. Platen), & &; from S. & G. coll.

121. CHARAXES GEORGIUS.

Charaxes georgius, Staudinger, Deutsche ent. Zeit., Lep. v. p. 262 (1892).

a-c. Mindoro (Dr. Platen), \eth \eth , \Im ; from S. & G. coll.

122. CHARAXES HEMANA.

Charaxes hemana, Butler, Trans. Ent. Soc. 1870, p. 122, pl. iv. fig. 1.

- a. North India, 3.
- b-d. Mussuri (Lidderdale), ♂ ♂, ♀; from S. & G. coll.
 - e. North of Landoor (Lidderdale), ♀.

123. CHARAXES REPETITUS, sp. n.

d. The Bornean representative of C. polyxena. Above tawny, deepening to mahogany-brown towards anal angle of secondaries: external border of primaries black, narrowest at external angles (about 6 millims.), enclosing a transverse oblique elliptical spot of the ground-colour near its inner margin, on internomedian interspace, gradually widening above the latter to third median branch where it is 13 millimetres wide, thence running obliquely inwards to costa where it attains its greatest width of 1 inch: area immediately within the angle, from costa to first median branch vellowish, bounded internally by a black irregular discocellular marking, and three irregularly placed lunules, a trace of a fourth interrupted lunule on the internomedian area; secondaries with the apical area smoky black, forming a vague diffused patch, on which are two white points, the outer half of the veins, which pass through this patch, black; the outer half of the area between the latter and the origin of the costal vein yellowish, bounded internally by an oblique blackish dash; outer border deepening to mahogany-brown and with a smoky blackish marginal stripe; a submarginal series of five diffused black spots, bounded internally by white transverse dashes, the last of these accompanied by a few violet scales. Body normal: under surface glaucous violaceous ash-coloured, with the usual darker areas somewhat olivaceous; other markings much as usual, but not strongly defined. Expanse of wings 91 millimetres.

a. Sarawak (Everett), d.

There can be no question as to this being a distinct species, although not sufficiently different from its allies to be of startling interest.

124. CHARAXES POLYXENA.

- Q. Papilio polyxena, Cramer, Pap. Exot. i. pl. liv. A, B (1779).
 - a. Without locality (coll. Kaden), &; from S. & G. coll.
 - b. China (Brenchley), Q.

125. CHARAXES BERNARDUS.

2. Papilio Bernardus, Fabricius, Ent. Syst. iii. 1, p. 71 (1793); Donovan, Ins. China, pl. 35 (1789).

- a. Without locality (coll. Druce), &; from S. & G. coll.
- b. China, ♀.
- c. "N. India" (E. I. Museum), ♀.

Probably a seasonal form of the preceding, which it nearly resembles; the male has a trace of white beyond the cell of primaries and less falcate wings, with scarcely any tawny marking on the black border.

From Tilin Yaw we have a male example of a *Charaxes*, collected by Mr. E. Y. Watson, which, on the upper surface so nearly approaches C. bernardus \mathcal{S} in general aspect and colouring, that I cannot venture to separate it; its under-surface colouring is, however, considerably darker. Possibly this will prove to be an aberrant form of some well-known and abundant species.

126. CHARAXES HIPPONAX.

Charaxes hipponax, Felder, Reise der Nov., Lep. iii. p. 443 (1867). Var., Charaxes hindia, Butler, Lep. Exot. xii. pl. xxxvii. fig. 5 (1872). Var., Charaxes jalinder, Butler, l. c. pl. xxxvii. fig. 4 (1872).

Var. C. hindia.

- a. Mungphu (Atkinson), d.
- b. India, ♀; from S. & G. coll.

Transitional forms to C. jalinder.

- c. Bhotan (Lidderdale), &.
- d. Bhotan (Knyvett), &; from S. & G. coll.
- e, f. Darjiling (Druce coll.), & &; from S. & G. coll.
- g, h. Mungphu (Atkinson), δ .
 - i. Sikhim (Lidderdale), &.
- j-r. Chin Hills, Burmah (Watson), δ δ .
 - s. Moulmein (Archdeacon Clark), 2.

Var. C. jalinder, typical.

- t. Mungphu (Atkinson), 3.
- u. Darjiling (Lidderdale), Q.
- v-x. Darjiling (Druce coll.), $\delta \delta$, \circ .
 - y. Bhotan (Lidderdale), \circ .

Hewitson coll. as (C. polyxena).

- z. Without locality, ♀.
- aa. India, ♂.

True C. hipponax (probably wet-season form).

bb, cc. North India, ♂, ♀.

- dd. Darjiling (Miss H. Dendy), &.
- ee. Darjiling (Indian Museum), 3.
- ff. Darjiling (J. Fotheringham), 3.
- gg. Assam (Dr. Watt), 3.
- hh. North India, J.
- ii, jj. Nepal (Hardwicke), 3, 9.
 - kk, Khasia Hills (Watson), J.
 - ll. Chin Hills, Burmah (Watson), d.

127. CHARAXES BUPALUS.

Charaxes bupalus, Staudinger, Deutsche ent. Zeit., Lep. 1889, p. 84.

a, b. Palawan (Dr. Platen), & &; from S. & G. coll.

128. CHARAXES BORNEENSIS.

Charaxes borneensis, Butler, Lep. Exot. i. p. 16, pl. vi. fig. 2 (1869).

- a, b. Baram (Everett), $\delta \delta$.
 - c-e. Borneo (Low), $\vec{\sigma}$ $\vec{\sigma}$; from S. & G. coll.

129. Charaxes pleistoanax.

Charaxes pleistoanax, Felder, Reise der Nov., Lep. iii. p. 443 (1867). Var., Charaxes khasianus, Butler, Lep. Exot. xii. pl. xxxvii. fig. 6 (1872).

Var., Charaxes khimalara, Butler, l. c. fig. 1.

Typical form.

- a. Sikhim (G. F. Hampson), J.
- b. Darjiling (J. Fotheringham), 3.
- c. Bhutan (G. C. Dudgeon), J.
- d. Assam (coll. Druce), &; from S. & G. coll.

Hewitson coll. (as C. polyxena).

- e. Without locality, 3.
- Var. C. khasianus (probably the dry-season form).
 - f. Darjiling (G. A. J. Rothney), d.
 - g. Darjiling (Lidderdale), Q.
 - h. Darjiling (Lidderdale), 3; from S. & G. coll.
 - i. Darjiling (coll. Druce), &; from S. & G. coll.
 - j. Darjiling (H. J. Elwes), \mathfrak{P} ; from S. & G. coll.
 - k. Darjiling (Indian Museum), 3.
 - l. Sikhim (Dr. T. C. Jerdon), 3.
- Dr. F. Moore is of opinion that C. khasianus is distinct from C. pleistoanax, but it chiefly differs in its clearer and brighter

colouring; I cannot believe it to be more than a seasonal variety: the female differs rather more than the male.

Var. C. khimalara (probably extreme wet-season form).

- m. Buxa (G. F. Hampson), J.
- n Darjiling (J. Fotheringham), J.

This completes the so-called *C. psaphon* group, and commences the *C. marmax* group; the latter might formerly have been again subdivided on account of the two types of males, only the species now can be arranged to show a gradual transition from the one type to the other; the females show great uniformity of character throughout the entire series.

23. C. MARMAX GROUP.

130. CHARAXES CIMON.

Charaxes cimon, Felder, Reise der Nov., Lep. iii. p. 439, pl. lviii. figs. 6, 7 (1867).

- a, b. Batchian (Wallace), δ , φ ; from S. & G. coll.
 - c. Batchian (Dr. Platen), ♀; from S. & G. coll.

Hewitson coll. as C. affinis.

d. Batchian, d.

131. CHARAXES PAPUENSIS.

Charaxes papuensis, Butler, Lep. Exot. p. 15, pl. vi. fig. 1 (1869). Charaxes cimonides, Rothschild, Novit. Zool. ii. p. 356 (1894).

a. N.W. New Guinea (Burke), &.

It is possible that there may be two species of nearly allied Charaxes in New Guinea; but it seems more probable that the differences between C. papuensis and C. cimonides indicated by Mr. Rothschild are of seasonal than specific value. However, with only one example before me, I do not feel competent to form any decided opinion on this point and am quite open to conviction.

132. CHARAXES LAYARDI, sp. n.

3. A representative of *C. cimon*, larger; the inner edge of the black border of primaries deeply notched and not quite so wide; a black bar on the discocellulars in all the wings, but no markings between the latter and the black border; the black border of the secondaries narrower, the occlloid submarginal spots more

isolated, not pupilled, excepting towards anal angle; under surface altogether redder than in *C. cimon*, the occiloid patches on the secondaries smaller, forming a narrower belt, less brightly coloured, and with their outer marginal black spots narrower and more lunate in character; outer border more uniform in colouring, tawny, with greyer marginal band. Expanse of wings 99 millims.

Type, a. New Britain (Mus. Godeffroy), &.

b, c. New Ireland (Layard), & &; from S. & G. coll.

133. CHARAXES MARS.

Charaxes mars, Staudinger, Exot. Schmett. p. 171 (1886).

Celebes.

This very fine species appears to belong to the C. cimon group; it is not in the Museum series.

134. Charaxes fervens, sp. n.

- \mathcal{S} . Size and general form of C. Layardi: pattern above very similar to that of C. baya, but with the broadest portion of the outer border of the primaries produced inwardly, the divided black spot on the discocellulars and the black marginal lunate streaks on the secondaries of C. parmenion (C. latona, \mathcal{S}); the apical patch and submarginal spots of the hind wings however remain as in C. baya: on the under surface the pattern and colouring show distinct affinity to C. cimon and allies, the band before the middle is however better defined, standing out in rufous on a yellowish background, and on the primaries it is more oblique than in any of the allied species.
 - a. Nias (Dr. Schreiber).

135. CHARAXES AFFINIS.

- 3. Charaxes affinis, Butler, Proc. Zool. Soc. 1865, p. 636, pl. xxxvii. fig. 4.
 - Q. Charaxes Wallacei, Butler, Lep. Exot. p. 100, pl. xxxviii. fig. 2 (1872). S var., Charaxes demonax, Felder, Reise der Nov., Lep. iii. p. 440 (1867).

Type, a. Macassar (Wallace), ♂.

- b. Menado (Dr. Meyer), \circ .
- c. Ternate (Wallace), &, var. demonax; from S. & G. coll.

Hewitson coll.

d. Macassar, δ .

Type, e. Macassar, ♀, as C. polyxena.

136. CHARAXES LATONA.

Q. Charaxes latona, Butler, Proc. Zool. Soc. 1865, p. 636, pl. xxxvii. fig. 1.

Charaxes brennus, Felder, Reise der Nov., Lep. iii. p. 439, pl. lix. figs. 1, 2

(1867).

J. Charaxes parmenion, Felder, l. c. n. 717.

Charaxes aruanus, Butler, Lep. Exot. p. 100 (1872).

a. Near Macassar (Wallace), $\delta = C$. parmenion.

Type, b. Timor (Wallace), \circ .

c. Amboyna, J; from S. & G. coll.

d. Aru (Wallace), $\mathcal{L} = C$. aruanus; from S. & G. coll.

Hewitson coll. (as C. affinis).

e. Without locality, &.

137. Charaxes scylax.

Charaxes scylax, Felder, Reise der Nov., Lep. iii. p. 442 (1867).

a. Java (Argent), 3.

138. Charaxes amycus.

Charaxes amycus, Felder, Wien. ent. Monatschr. v. p. 303 (1861).

Charaxes lunawara, Butler, Lep. Exot. pl. xxxvii. fig. 2 (1872).

a, b. Davao, S.E. Mindanão (Dr. Platen), ♂,♀; from S. & G. coll.

c. Philippines (Bates coll.), &; from S. & G. coll.

 \mathcal{Q} . Type of d. Without locality (*Druce coll.*), \mathcal{Q}^* ; from S. & G. C. lunawara. coll

Hewitson coll. (as C. polyxena).

e. Philippines, ♀.

139. Charaxes aristogiton.

Charaxes aristogiton, Felder, Reise der Nov., Lep. iii. p. 445 (1867).

Charaxes desa, Moore, Proc. Zool. Soc. 1878, p. 832.

a-c. Darjiling (H. J. Elwes), \eth \eth ; from S. & G. coll.

d. Sikhim, d.

Type of C. desa. e. Upper Tenasserim (Wood-Mason), d.

Dr. Moore has considered *C. desa* distinct on the ground that the inner edge of the black border of the primaries is produced inwards, to some distance beyond the lunate markings, upon the costal area; this character, however, is certainly no more constant in this species than in the allied *C. marmax*.

^{*} The male of C. lunawara is a slight variation of C. marmax.

140. CHARAXES MARMAX.

Charaxes marmax, Westwood, Cab. Orient. Ent. pl. xxi. figs. 3-5 (1848).

- a-c. Darjiling (H. J. Elwes), $\eth \ \eth$, Q; from S. & G. coll.
 - d. Darjiling (Lidderdale), Q.
- e, f. Darjiling (Mrs. R. V. Boyle), & d.
- g, h. Khasia Hills (Watson), & J.
 - i. Assam (Watson), J.
 - j. Silhet (E. Doubleday), 3.
 - k. Silhet (Stainsforth), 3.
 - 1. Buxa (Knyvett), &; from S. & G. coll.
 - m. Mungphu (Atkinson), d.
 - n. East Pegu (W. Doherty), &; from S. & G. coll.

Hewitson coll. (as C. polyxena).

o. Without locality, 3.

141. CHARAXES KAHRUBA.

Haridra kahruba, *Moore, Lepid. Ind.* vol. ii. p. 235, pl. 171. figs. l *a-c* (1895).

- a. Assam (coll. Druce), &; from S. & G. coll.
- b. Darjiling (Lidderdale), ♀.
- c. Darjiling (Lidderdale), ♀; from S. & G. coll.
- d. Darjiling (Mrs. R. V. Boyle), J.
- e, f. Mungphu (Atkinson), ♂ ♂.
 - g. Bhutan (G. C. Dudgeon), 3.
 - h. Silhet (Argent), d.

Hewitson coll. (as C. polyxena).

- i. Silhet, ♂.
- j. North India, &.

142. CHARAXES HARMODIUS.

Charaxes harmodius, Felder, Reise der Nov., Lep. iii. p. 445 (1867).

a, b. Palawan, Philippines (Dr. Platen), 3 3.

The above specimens are labelled as "C. harpagon, Staud.," apparently a MS. name; they agree perfectly with the description of Felder's species from Java.

143. CHARAXES DISTANTI.

Charaxes Distanti, Honrath, Berl. ent. Zeit. xxix. p. 277 (1885).

- a, b. Borneo (Low), & &; from S. & G. coll.
 - c. N.W. Borneo (Everett), 3.
- d, e. Borneo, & &.

This species has much the aspect of a ruddy-bordered *C. marmax*, but the submarginal lunules on the under surface are far more silvery.

24. C. EURYALUS GROUP.

144. CHARAXES EURYALUS.

Papilio euryalus, Cramer, Pap. Exot. i. pl. lxxiv. A, B (1779).

- Q. Papilio nisus, Cramer, l. c. ii. pl. cl. A, B (1779).
 - a. Without locality (coll. Kaden), &; from S. & G. coll.
 - b. Amboina (Wallace), &; from S. & G. coll.
 - c. Amboina (Wallace), d.

Hewitson coll.

- d. Amboina, d.
- e, f. Without locality, \mathcal{E} , \mathcal{D} .

25. C. ETESIPE GROUP.

145. CHARAXES CACUTHIS.

Charaxes cacuthis, Hewitson, Exot. Butt. iii. Char. pl. iii. figs. 12, 13 (1863).

a. Madagascar, d.

Hewitson coll.

- b, c. Madagascar, ♂, ♀.
 - d. Without locality, d.

146. Charaxes tavetensis.

Charaxes tavetensis, Rothschild, Novit. Zool. i. p. 535 (1894).

Taveta, E. Africa.

Not in the Museum collection.

147. Charaxes etesipe.

Nymphalis etesipe, Godart, Enc. Méth. ix. p. 355 (1823); Butler, Trans. Ent. Soc. 1869, p. 273, pl. v. figs. 5, 6.

Papilio etheocles, Drury (not Cramer), Ill. Exot. Ent. iii. pl. 10 (1782). Nymphalis etheta, Godart, Enc. Méth. ix. p. 356 (1823).

- a. Barombi, Cameroons (Dr. Preuss), &; from S. & G. coll.
- b. Cameroons, d; from S. & G. coll.
- c. Cameroons (Druce coll.), &; from S. & G. coll.
- d. Cameroons, 3.
- e, f. West Africa, ♀♀; from S. & G. coll.
- g–i. Isubu, ♂ ♂ , ♀ .
- j, k. Old Calabar (White), & &; from S. & G. coll.
 - l. Croboe district, Acera (Hickling), d.

m-o. Sierra Leone (Dr. Preuss), ♂ ♂,♀.

p. Sierra Leone (Crowley), &.

q. Sierra Leone (Barchard), Q.

Hewitson coll.

r-t. Sierra Leone, \eth \eth , Q.

u, v. Without locality, \mathcal{E} , \mathcal{P} .

This completes the species usually considered to belong to the genus *Charaxes*. In 1881, however, we received a species from Socotra having all the characters of *Charaxes* excepting the pattern (which is that of *Palla varanes* and allies). The supposed genus *Palla* differs no more from *Charaxes* than the various sections of the latter genus do from one another; the single tail to the secondaries is characteristic of females in the *C. mycerina* group.

26. C. VARANES GROUP.

148. CHARAXES BALFOURI.

Charaxes Balfouri, *Butler*, *Proc. Zool. Soc.* 1881, p. 176, pl. xviii. fig. 6. Type, a. Socotra (*Prof. I. B. Balfour*).

149. CHARAXES VARANES.

Papilio varanes, Cramer, Pap. Exot. ii. pl. clx. D, E (1779).

- a. Caffraria (Druce coll.), &; from S. & G. coll.
- b. S. Africa (Sir Andrew Smith), \(\psi \).
- c. Natal (Druce coll.), ♀; from S. & G. coll.
- d. Natal (Shelley), &; from S. & G. coll.
- e. Natal (Argent), 3.
- f. Natal (Gueinzius), d.
- g. Durban (C. R. N. Burrows), d.
- h. Lake Mweru (Crawshay), d.
- i, j. Central Africa (Emin Pasha), d.
 - k. British E. Africa (Dr. Gregory), 3.
 - l. Lake Tanganyika (C. Hore), \circ .
 - m. Taita, East Africa (J. A. Wray), ♀.
 - n. Zomba (Macclounie), 3.
- o, p. Old Calabar (J. W. Cockburn), 3.

Hewitson coll.

- q, r. Natal, δ, \circ .
 - s. Without locality, ♀.

150. Charaxes nigrescens.

Possibly a seasonal form of *C. fulvescens*; in some respects nearer to *C. varanes*, from which it differs in the yellowish basal area and blackish external area of the upper surface; the outer or submarginal row of spots reduced to points, the inner row small but sharply defined and ochreous; spots on disc of secondaries large and black: under surface pale greenish-yellow towards the base, all the markings strongly defined in black, the postmedian stripe dark and well defined, the first ocellus very black, the external bordering of the postmedian stripe very silvery, very metallic, not merely glaucous; external area more olivaceous than in *C. varanes* or *C. fulvescens*. Expanse of wings 90–98 millims.

Type, a. Sierra Leone (Dr. Preuss), &; from S. & G. coll.

b, c. Sierra Leone (Barchard), Q, d.

d, e. Sierra Leone (P. Crowley), \eth , \diamondsuit .

f. Croboe district, Accra (Higlett), &.

g. Acera (E. T. Carter), &.

h. Ashanti, d.

Hewitson coll.

i. Gold Coast, &.

I should unhesitatingly have considered this to be distinct from *C. fulvescens*, but for the fact that Drury gives Sierra Leone as the locality from which his specimen (figured as *P. varanes*) was received.

151. Charaxes fulvescens.

Charaxes fulvescens, Aurivillius, Ent. Tidskr. xii. p. 216 (1891).

Papilio varanes, Drury, Ill. Exot. Ins. iii. p. 42, pl. 31. figs. 1, 2 (1782).

- a. Barombi, Cameroons (Dr. Preuss), &; from S. & G. coll.
- b. Victoria, Cameroons (Druce coll.), &; from S. & G. coll.
- c. Congo (Bates coll.), &; from S. & G. coll.

Hewitson coll.

d. Without locality.

27. C. LICHAS GROUP.

152. CHARAXES LICHAS.

Philognoma lichas, Doubleday, Gen. Diurn. Lep. pl. 49. fig. 3 (1850).

a-c. Ashanti, $\delta \delta$, ς .

d. Ashanti (coll. Kaden), &; from S. & G. coll.

- e. Accra (E. T. Carter), d.
- f. Croboe district, Accra (Higlett), &.
- g. Barombi, Cameroons (Dr. Preuss), &; from S. & G. coll.
- h, i. Old Calabar (J. W. Cockburn), 3, 9.
- j, k. Angola (Rogers), & &; from S. & G. coll.
- l, m. Sierra Leone (Dr. Preuss), 2, &; from S. & G. coll.
 - n. Sierra Leone (Barchard), 3.

Hewitson coll.

- o-q. Angola, ♂♂.
 - r. Cameroons, Q.

153. CHARAXES FALCATA.

Philognoma falcata, Butler, Lepid. Exot. p. 101, pl. xxxviii. fig. 1 (1872).

Types, a-d. Ashanti, ♂♂.

e. Old Calabar (White), &; from S. & G. coll.

This is a smaller, deeper coloured, more heavily black-bordered and shorter-tailed species than *C. paphianus*; it may be a seasonal form, for though we do not possess both from the same locality exactly, the range of *C. paphianus* would embrace that of *C. falcata*. I, however, am inclined to think that the latter is strictly a coast species of limited range.

154. CHARAXES PAPHIANUS.

Charaxes paphianus, Ward, Ent. Month. Mag. viii. p. 120 (1871).

- a. Sierra Leone (Dr. Preuss), &; from S. & G. coll.
- b. Barombi, Cameroons (Dr. Preuss), &; from S. & G. coll.
- c. Angola (Rogers), &; from S. & G. coll.

Hewitson coll.

d, e. Angola, \eth \eth .

28. C. DECIUS GROUP.

155. CHARAXES VIOLINITENS.

Philognoma violinitens, Crowley, Trans. Ent. Soc. 1890, p. 554, pl. xviii. figs. 1, 2.

♂ Accra, ♀ Cameroons.

Hewitson coll. (as P. decius).

a. Old Calabar, \circ .

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I think it open to question whether the sexes figured by Mr. Crowley actually belong to the same species, the female

being remarkably near to an Angolan insect of which we have both sexes; however, until females are received from Accra which as nearly resemble the male, the point cannot be decided.

156. CHARAXES CONIGER, sp. n.

Allied to *C. decius*, but the males with the white band much more broadly bordered with silvery-blue and extending to just below the median vein of secondaries, the orange-tawny patch which joins it at this point much brighter in colour and forming a well-defined cone, the outer edge of which is mottled with blackish and bounded by the third median branch; the tail, which is longer than in *C. decius*, is also tawny, but tipped with creamy-white; the submarginal ocellus in the radial interspace is isolated; the females resemble the insect figured as *C. violinitens* \$\mathbb{Q}\$, excepting in having a submarginal band of six hastate tawny (and a seventh nearly white, costal) spots on the primaries. In other respects this species agrees almost in every detail with *C. decius*.

Types, a, b. Old Calabar, δ δ ; from S. & G. coll.

- c. Congo (Bates coll.), ♀; from S. & G. coll.
- d. Angola (Monteiro), &; from S. & G. coll.

Hewitson coll. (as C. decius).

e, f. Angola, d, 9.

It is just possible that this may be a seasonal form of *C. decius*, and *C. publius* a seasonal form of *C. Ussheri*; but only breeding can decide this.

157. CHARAXES DECIUS.

Papilio decius, Cramer, Pap. Exot. ii. pl. exiv. A, B (1779).

- a. Acera (E. T. Carter), δ .
- b. Croboe district, Accra (Higlett), d.
- c. West Africa, ♀.
- d, e. Ashanti, & &.
 - f. Sierra Leone (Rev. D. F. Morgan), 2.

Hewitson coll.

g. Without locality, &.

158. CHARAXES PUBLIUS.

Palla publius, Staudinger, Deutsche ent. Zeit., Lep. v. p. 267 (1892). Philognoma rectifascia, Weymer, Stett. ent. Zeit. liii. p. 91 (1892). LINN. JOURN.—ZOOLOGY, VOL. XXV. a-c. Old Calabar (White), δ δ , φ ; from S. & G. coll.

d. West Africa, ♀; from S. & G. coll.

Hewitson coll.

e. Angola, ♀.

f. Without locality, 2.

159. CHARAXES USSHERI.

Philognoma Ussheri, Butler, Trans. Ent. Soc. 1870, p. 124; Lep. Exot. i. pl. xxi. fig. 3 (1871).

Nymphalis decius, Lucas, Lep. Exot. pl. lxiv. fig. 2 (1835).

a-c. Sierra Leone (Dr. Preuss), ♂ ♂, ♀; from S. & G. coll.

d, e. Sierra Leone (Barchard), d.

f. Sierra Leone (P. Crowley), &.

g. Sierra Leone (Druce coll.), &; from S. & G. coll.

h, i. Barombi, Cameroons (Dr. Preuss), σ , \circ ; from S. & G. coll.

j. Cameroons, J.

k, l. Old Calabar (White), & &; from S. & G. coll.

m. Old Calabar, J.

n. Congo (Bates coll.), &; from S. & G. coll.

o. Dahomey (Bates coll.), ♀; from S. & G. coll.

p. Ashanti, \circ .

Note.—Since this paper was read, Dr. F. Moore has described and figured the following species, namely:—Haridra Adamsoni, Lepidopt. Indica, vol. ii. p. 236, pl. 173, and Eulepis Wardii, tom. cit. p. 262, pl. 188.—A. G. B., July 16, 1896.